



Patch Management APIs

User Guide

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Get Started

Getting Started with Patch Management APIs

A few Patch Management features are available through REST APIs. You can use Swagger tool to access the REST APIs we support. You cannot use Patch Management APIs with the Free License.

Values of the query parameters must be encoded. URL encoding conversion to ASCII character set is required to ensure characters are transmitted correctly. The URLs contain characters that might not be in the ASCII character, so the URL must be converted into a valid ASCII format. Encoding the URL replaces the unsafe ASCII characters with a % followed by two hexadecimal digits. Since a URL must not contain spaces, the encoding replaces a space with a plus sign (+) or with %20.

Accessing APIs Using Swagger

Swagger is a widely-adopted specification that allows for programmatically describing REST APIs. The Swagger UI provides all the details about the APIs and how to invoke them. This includes information like the HTTP verbs to use (GET, POST, PUT, etc.), the URL paths, allowable parameters and types, and so on.

You can directly access the Swagger UI from the following URL:

`http://gateway.<QualysURL>/apidocs/pm/v1#/`

For example, if your account is on US Platform 2

`https://gateway.qg2.apps.qualys.com/apidocs/pm/v1#/`

Qualys Platforms

Qualys maintains multiple platforms. The Qualys URL that you should use for API requests depends on the platform where your account is located. To identify your Qualys platform and get the API URL, visit: <https://www.qualys.com/platform-identification/>.

Do I need to Authenticate to use the Swagger UI?

Authentication to the Qualys Cloud Platform is necessary before you try out the APIs.

1. Provide the user name and password
2. Select the **Permissions** check box and click **Login**.
3. Copy the token and paste it in the **Value** field.
4. Click **Authorize**.

You can now use the APIs using the Swagger UI!

Using token values in the API calls

You can use QQL tokens in your API requests. [Click here](#) to view the supported tokens.

Generating the JSON Web Token (JWT) for External Authentication

Some Patch Management features are available through REST APIs. To use the Patch Management APIs from the command line, you must authenticate to the Qualys Cloud Platform using Qualys account credentials (user name and password) and get the JSON Web Token (JWT) before you can start using the Patch APIs.

Use the Qualys Authentication API to get the JWT. Access support information at www.qualys.com/support.

Example Authentication Curl Request:

API Request

```
curl -X POST https://<QualysBaseURL>/auth -H 'Content-Type: application/x-www-form-urlencoded' -d 'username=value1&password=value2&token=true&permissions=true'
```

where

- gateway.qg1.apps.qualys.com is the base URL for the Qualys API server where your account is located
- value1 is username and value 2 is password of the user account for which you want to fetch Asset Management data
- token must be true
- permissions must be true
- Content-Type must be application/x-www-form-urlencoded

The Authentication API returns a JSON Web Token (JWT), which you can use for authentication during Patch API calls. The token expires in 4 hours. You must regenerate the token to continue using the Patch APIs.

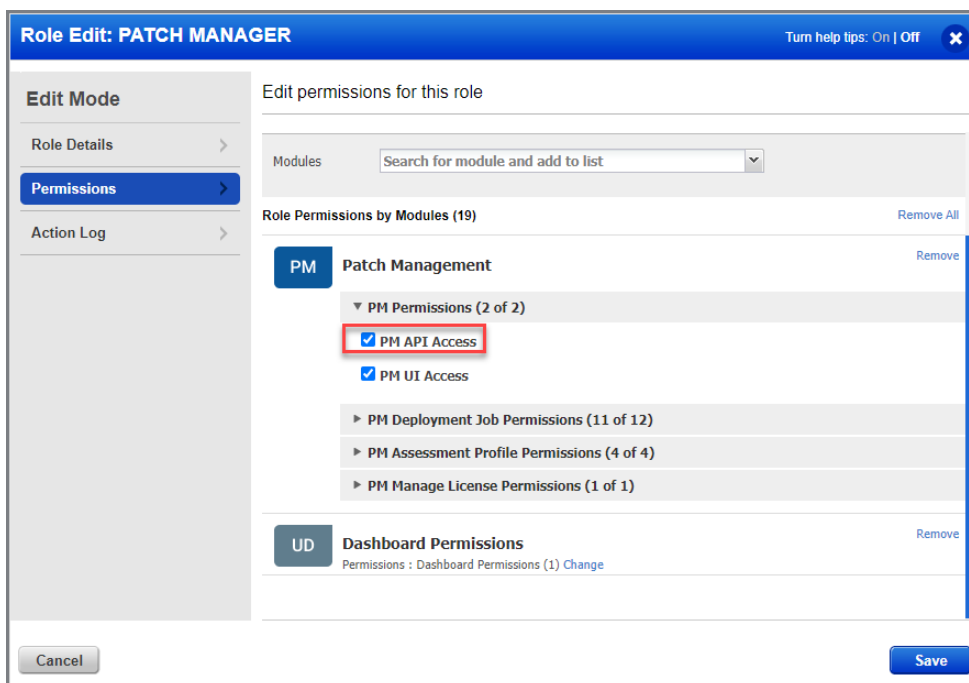
To make calls using the Patch APIs, you must have the PM.API.ACCESS permission.

Assigning the PM API Permission

You must assign the PM API Access permission to allow Patch Management users to make API calls.

To assign the permission to Patch Management users,

1. Navigate to the **Administration** application.
2. Go to **Users > Role Management**.
3. Select the role you want to assign the permission to and click **Edit**.
4. Click **Permissions** and click **Edit**.
5. Expand PM Permission and select the **PM API Access** check box.



6. Click **Save**.

Note: When you select this permission, all users that are assigned the role will have access to APIs.

Application

Get the Patch Management Application Version

/rest/pm/v1/details

[GET]

You can get the version of the Patch Management application that is currently deployed in your environment.

Sample - Get the Patch Management application version

API request

```
curl -X GET  
"https://<QualysBaseURL>/pm/v1/details" -H "accept: application/json"-  
H "Authorization: Bearer <<jwt token>>"
```

Response

```
{  
  "appVersion": "1.6.0.0-72"  
}
```

Patch Catalog

Get Linux Patch Packages

/rest/pm/v1/patchcatalog/patch/packages

[GET]

Specify the patch UUID to fetch a paginated list of packages associated with a Linux patch.

Input Parameters

Parameter	Description
filter (string)	(Optional) Specify the Package name to search.
pageNumber (integer)	(Optional) The page to be returned. The default value is 0.
pageSize (integer)	(Optional) Limit number of rows to be returned per page, the default value is 10.
patchUuid (string)	(Required) Specify the Patch ID to search.

Sample - Get the list of packages associated with a Linux patch

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/patchcatalog/patch/packages?filter=libexif-0.6.21&pageNumber=0&pageSize=10&patchUuid=003378c8-a176-3ccb-b247-90de95e78890" -H "accept: application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
[
  {
    "packageName": "libexif-0.6.21-7.el7_8.aarch64.rpm",
    "architecture": "aarch64"
  },
  {
    "packageName": "libexif-0.6.21-7.el7_8.rpm",
    "architecture": "noarch"
  },
  {
    "packageName": "libexif-0.6.21-7.el7_8.x86_64.rpm",
    "architecture": "x86_64"
  }
]
```

Get Products Associated with Windows Patch

/rest/pm/v1/patchcatalog/patch/{patchId}/products

[GET]

Specify the patch ID to fetch a list of products associated with a Windows patch.

Input Parameters

Parameter	Description
patchId (string)	(Required) Specify the Patch ID to search.

Sample - Get the list of patches associated with a Windows patch

API request

```
curl -X GET  
"https://<QualysBaseURL>/pm/v1/patchcatalog/patch/12d8f363-7aa9-3c11-  
b07b-08b181dc24cf/products" -H "accept: application/json" -H  
"Authorization: Bearer <<jwt token>>"
```

Response

```
[ {  
  "product" : [ "Windows Server 2008, Datacenter Edition", "Internet  
Explorer 7", "Windows Server 2008, Standard Edition", "Windows Server  
2008, Web Edition", "Windows Server 2008, Enterprise Edition" ]  
} ]
```

Get Product Vulnerabilities

`/rest/pm/v1/patchcatalog/patch/products/vulnerability/count`

[GET]

Use this API to get a list of products and their linked vulnerabilities.

Input Parameters

Parameter	Description
severityList (string)	(Optional) Specify a severity. Available values: Critical, Important, Low, Moderate, None
tagUUIDs (string)	(Optional) List of tag UUIDs

Sample - Get a list of all vulnerabilities linked to a product

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/patchcatalog/patch/products/vulnerability/count?severityList=Critical&tagUUIDs=781270dc-02ba-45c3-9336-78edf4802c1d" -H "accept: application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
[
  {
    "name": "Windows",
    "totalQIDCount": 109,
    "patchableQIDCount": null,
    "type": "APP_FAMILY",
    "patchableQIDs": null,
    "totalQIDs": null
  },
  {
```

```
"name": "Firefox",
"totalQIDCount": 43,
"patchableQIDCount": null,
"type": "APP_FAMILY",
"patchableQIDs": null,
"totalQIDs": null
},
{
  "name": "Java",
  "totalQIDCount": 22,
  "patchableQIDCount": null,
  "type": "APP_FAMILY",
  "patchableQIDs": null,
  "totalQIDs": null
},
{
  "name": "Edge",
  "totalQIDCount": 14,
  "patchableQIDCount": null,
  "type": "APP_FAMILY",
  "patchableQIDs": null,
  "totalQIDs": null
}
]
```

Get Patches from the Catalog

`/rest/pm/v1/patchcatalog/patches`

[GET]

You can fetch a paginated list of patches from the patch Catalog specific to Windows or Linux.

Input Parameters

Parameter	Description
filter (string)	(Optional) Filter criteria to list patches. For example, vendorSeverity:'Critical' AND rebootRequired:true
pageNumber (integer)	(Optional) The page to be returned. The default value is 0.
pageSize (integer)	(Optional) Limit number of rows to be returned per page, the default value is 10.
platform (string)	(Optional)The platform type. - Available values: Linux, Windows - Default value: Windows
sort (string)	(Optional) Sort the patch values by certain data. For examples, [{"vendorSeverity":"asc"}]

Sample - Get Windows Patches from the Catalog

API request

```
curl -X GET
```

```
"https://<QualysBaseURL>/pm/v1/patchcatalog/patches?filter=vendorSeverity%3A%20Critical&pageNumber=0&pageSize=2&sort=%5B%7B%22publishedDate%22%3A%22asc%22%7D%5D" -H "accept: application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
[
  {
    "isSecurity": true,
    "rebootRequired": false,
    "vendorSeverity": "Critical",
    "description": "The Microsoft VM is a virtual machine for the Win32 operating environment. The Microsoft VM is shipped in most versions of Windows (a complete list is available in the FAQ), as well as in most versions of Internet Explorer. The present Microsoft VM, which includes all previously released fixes to the VM, has been updated to include a fix for the newly reported security vulnerability. This new security vulnerability affects the ByteCode Verifier component of the Microsoft VM, and results because the ByteCode verifier does not correctly check for the presence of certain malicious code when a Java applet is being loaded. The attack vector for this new security issue would likely involve an attacker creating a malicious Java applet and inserting it into a web page that when opened, would exploit the vulnerability. An attacker could then host this malicious web page on a web site, or could send it to a user in e-mail.",
    "title": "Flaw in Microsoft VM Could Enable System Compromise (816093)",
    "type": "OS",
    "appFamily": [
      "Windows"
    ],
    "qid": [
      "90161"
    ],
    "enabled": true,
    "platform": "Windows",
    "supersedes": [],
    "patchId": "c1645e07-7a3f-33e3-ae2d-bff7b4001146",
    "isRollback": false,
    "cve": [
      "CAN-2003-0111"
    ],
    "vendor": "Microsoft",
    "kb": "KB816093",
```



```

"downloadMethod": "Automatic",
"id": "c1645e07-7a3f-33e3-ae2d-bff7b4001146",
"supportedOs": null,
"architecture": [
  "X86"
],
"packageDetails": null,
"product": [
  "Windows XP Home Edition",
  "Windows XP Professional",
  "Windows NT Workstation 4.0",
  "Windows NT Server 4.0",
  "Windows NT Server 4.0, Enterprise Edition",
  "Windows XP Tablet PC Edition"
],
"servicePack": false,
"advisory": null,
"vendorlink":
"http://technet.microsoft.com/security/bulletin/ms03-011",
"osIdentifier": "WINDOWS",
"advisoryLink": null,
"deleted": false,
"isSuperseded": false,
"patchFeedProviderId": 1,
"syncDateTime": 1637673463488,
"vendorPatchId": "672",
"modifiedDate": 1565049600000,
"publishedDate": 1049846400000,
"category": "Security Patches",
"supersededBy": [],
"bulletin": "MS03-011"
},
{
  "isSecurity": true,
  "rebootRequired": false,
  "vendorSeverity": "Critical",
  "description": "The Microsoft VM is a virtual machine for the
Win32 operating environment. The Microsoft VM is shipped in most
versions of Windows (a complete list is available in the FAQ), as well
as in most versions of Internet Explorer. The present Microsoft VM,
which includes all previously released fixes to the VM, has been
updated to include a fix for the newly reported security
vulnerability. This new security vulnerability affects the ByteCode
Verifier component of the Microsoft VM, and results because the
ByteCode verifier does not correctly check for the presence of certain
malicious code when a Java applet is being loaded. The attack vector

```

for this new security issue would likely involve an attacker creating a malicious Java applet and inserting it into a web page that when opened, would exploit the vulnerability. An attacker could then host this malicious web page on a web site, or could send it to a user in e-mail.",

```
"title": "Flaw in Microsoft VM Could Enable System Compromise (816093)",
```

```
"type": "Application",
```

```
"appFamily": [
```

```
  "Virtual Machine"
```

```
],
```

```
"qid": [
```

```
  "90161"
```

```
],
```

```
"enabled": true,
```

```
"platform": "Windows",
```

```
"supersedes": [],
```

```
"patchId": "ab21fe7e-cfb5-314c-938d-8f20271760db",
```

```
"isRollback": false,
```

```
"cve": [
```

```
  "CAN-2003-0111"
```

```
],
```

```
"vendor": "Microsoft",
```

```
"kb": "KB816093",
```

```
"downloadMethod": "Automatic",
```

```
"id": "ab21fe7e-cfb5-314c-938d-8f20271760db",
```

```
"supportedOs": null,
```

```
"architecture": [
```

```
  "X86"
```

```
],
```

```
"packageDetails": null,
```

```
"product": [
```

```
  "Microsoft Virtual Machine (VM)"
```

```
],
```

```
"servicePack": false,
```

```
"advisory": null,
```

```
"vendorlink":
```

```
"http://technet.microsoft.com/security/bulletin/ms03-011",
```

```
"osIdentifier": "WINDOWS",
```

```
"advisoryLink": null,
```

```
"deleted": false,
```

```
"isSuperseded": false,
```

```
"patchFeedProviderId": 1,
```

```
"syncDateTime": 1638485700068,
```

```
"vendorPatchId": "673",
```

```
"modifiedDate": 1638403200000,
```

```
"publishedDate": 1049846400000,  
"category": "Security Patches",  
"supersededBy": [],  
"bulletin": "MS03-011"  
}  
]
```

Get Patch Details for Patches

/rest/pm/v1/patchcatalog/patches

[POST]

Specify the patch UUIDs to fetch corresponding patch details.

Input Parameters

Parameter	Description
attributes (string)	(Optional) From all attributes, specify comma-separated string of attributes that you want to fetch in the response.
platform (string)	(Optional)The platform type. <ul style="list-style-type: none"> - Available values: Linux, Windows - Default value: Windows
sort (string)	Sorting fields in JSON format. For example, [{"vendorSeverity":"asc"}]

Sample - Get Patch Details

API request

```
curl -X POST
"https://<QualysBaseURL>/pm/v1/patchcatalog/patches?attributes=isSecurity%2C%20rebootRequired%2C%20vendorSeverity&platform=Windows&sort=%5B%7B%22vendorSeverity%22%3A%22asc%22%7D%5D" -H "accept: application/json" -H "Authorization: Bearer <<jwt token>>" -H "Content-Type: application/json" -d "{\"patchUuid\":[\"12d8f363-7aa9-3c11-b07b-08b181dc24cf\", \"2db2d98d-01b7-3770-8224-795f13153e62\"]}"
```

Request Body - Specify the UUIDs

```
{  
  "patchUuid": [  
    "string"  
  ]  
}
```

Response

```
[  
  {  
    "isSecurity": true,  
    "rebootRequired": true,  
    "vendorSeverity": "Critical"  
  },  
  {  
    "isSecurity": true,  
    "rebootRequired": true,  
    "vendorSeverity": "None"  
  }  
]
```

Scan Result Patch

Get Patch Count

`/rest/pm/v1/patches/count`

[GET]

Use this API to fetch the patches count for a specified customer after applying the provided filters and group by terms.

Input Parameters

Parameter	Description
groupBy (string)	(Optional) Specify the group by criteria. For example, appFamily.
havingQuery (string)	(Optional) Specify a QQL to filter patches based on asset search criteria. For example, status:scanned
limit (string)	(Optional) Specify the number of patches to return.
platform (string)	(Optional) The platform type. - Available values: Linux, Windows - Default value: Windows
query (string)	(Optional) Specify a QQL to filter patches based on patch catalog search criteria For example, appFamily:Firefox Append the QQL (patchStatus:[Missing,Installed] and isSuperseded:false) to filter the latest missing and

installed patches.

sort (string)

(Optional) Sort the patch values by certain data.

For examples, [{"appFamily": "asc"}]

Note: The request must contain the same token for groupby and sort.

Sample - Get Patch Count for Windows Platform

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/patches/count?groupBy=vendorSeverity&groupBy=appFamily&havingQuery=name%3A%22Windows%22&platform=Windows&query=isSecurity%3A%20true%20and%20%28patchStatus%3A%5BMissing%2C%20Installed%5D%20and%20isSuperseded%3A%20false%29&sort=%5B%7B%22vendorSeverity%22%3A%22asc%22%7D%5D" -H "accept: application/json" -H
"Authorization: Bearer <<jwt token>>"
```

Response

```
{
  "vendorSeverity": {
    "Critical": 28,
    "Important": 58,
    "Low": 2,
    "Moderate": 2,
    "None": 24
  },
  "appFamily": {
    "Windows": 34,
    "Office": 25,
    "Office Viewer": 24,
    ".Net": 23,
    "Lync": 23,
    "Visual C++": 12,
    "Notepad++": 4,
    "Chrome": 2,
    "Cisco Jabber": 2,
    "Node.js": 2,
    "Windows Defender": 2,
    "Edge": 1,
```

```
"Firefox": 1,  
"GIT": 1,  
"Internet Explorer": 1,  
"Plantronics Hub": 1,  
"Reader": 1,  
"SQL Server": 1,  
"WinSCP": 1  
}  
}
```


Get a List of Patches for a Specific Customer

`/rest/pm/v1/patches`

[GET]

Use this API to get patches for a given customer after applying the specified filter.

Input Parameters

Parameter	Description
havingQuery (string)	(Optional) Specify a QQL to filter patches based on asset search criteria. For example, status:Enabled
pageNumber (string)	(Optional) The page to be returned. The default value is 0.
pageSize (string)	(Optional) Limit number of rows to be returned per page, the default value is 10.
platform (string)	(Optional)The platform type. - Available values: Linux, Windows - Default value: Windows
query (string)	(Optional) Specify a QQL to filter patches based on patch catalog search criteria. For example, appFamily:Firefox Append the QQL (patchStatus:[Missing,Installed] and isSuperseded:false) to filter the latest missing and installed patches.

sort (string) (Optional) Sort the patch values by certain data.

For examples, [{"appFamily": "asc"}]

Sample - Get a list of patches for Windows Platform sorted by Vendor Severity

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/patches?havingQuery=name%3A%22Windows%22&pageNumber=0&pageSize=2&platform=Windows&query=isSecurity%3A%20true%20and%20%28patchStatus%3A%5BMissing%2C%20Installed%5D%20and%20isSuperseded%3A%20false%29&sort=%5B%7B%22vendorSeverity%22%3A%22asc%22%7D%5D"
-H "accept: application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
[
  {
    "architecture": [
      "X64"
    ],
    "bulletin": "MS13-098",
    "category": "Security Patches",
    "cve": [
      "CVE-2013-3900"
    ],
    "kb": "KB2893294",
    "modifiedDate": 1438732800000,
    "appFamily": [
      "Windows"
    ],
    "product": [
      "Windows Server 2012 R2 Datacenter (x64)",
      "Windows Server 2012 R2 Essentials (x64)",
      "Windows Server 2012 R2 Foundation (x64)",
      "Windows Storage Server 2012 R2 Workgroup (x64)",
      "Windows Hyper-V Server 2012 R2 (x64)",
      "Windows Server 2012 R2 Standard (x64)",
      "Windows Storage Server 2012 R2 Standard (x64)"
    ],
    "publishedDate": 1386633600000,
```

```

    "qid": [
      "90931"
    ],
    "rebootRequired": true,
    "supersededBy": [],
    "supersedes": [],
    "title": "Vulnerability in Windows Could Allow Remote Code
Execution (2893294)",
    "type": "OS",
    "vendor": "Microsoft",
    "vendorSeverity": "Critical",
    "vendorlink": "http://technet.microsoft.com/en-
us/security/bulletin/MS13-098",
    "missingCount": 1,
    "installedCount": 0,
    "downloadMethod": "Automatic",
    "advisory": null,
    "id": "0536aeec-60c0-383b-bbdd-8b8d1a35b6fa",
    "isSecurity": true,
    "isSuperseded": false,
    "isRollback": true
  },
  {
    "architecture": [
      "X64"
    ],
    "bulletin": "MS20-08-SSU-4569073",
    "category": "Security Patches",
    "cve": [],
    "kb": "KB4569073",
    "modifiedDate": 1597104000000,
    "appFamily": [
      "Windows"
    ],
    "product": [
      "Windows 10 Education (x64)",
      "Windows 10 Home N (x64)",
      "Windows 10 Pro for Workstations (x64)",
      "Windows 10 Pro Education (x64)",
      "Windows 10 Pro N (x64)",
      "Windows 10 Home (x64)",
      "Windows 10 Pro for Workstations N (x64)",
      "Windows 10 IoT Enterprise (x64)",
      "Windows 10 Enterprise (x64)",
      "Windows 10 Enterprise N (x64)",
      "Windows 10 Pro (x64)",

```

```

    "Windows 10 Pro Education N (x64)",
    "Windows 10 Education N (x64)"
  ],
  "publishedDate": 1597104000000,
  "qid": [
    "91653"
  ],
  "rebootRequired": true,
  "supersededBy": [
    "5d50d9a3-1c9f-3d51-97a0-99ddffdc675",
    "85909320-8fb5-34cf-b880-26a794fcd5a4",
    "09ca9f8d-ff18-39fd-a123-a04310681972",
    "9613985e-bdbd-3157-b902-3b45f0ce2529",
    "0078a4c0-e351-3f35-80f8-00912db355af",
    "e06baef7-7048-3dd2-97c2-c0172dec2328",
    "0c33b8ad-cedb-352e-80df-cc73d1b47d8f",
    "3aac98ad-9b5e-3e23-b347-b6b35747b8c1",
    "9bdd1e60-f2d4-3176-ae58-e17ab7606cc7",
    "e756063e-26e3-3507-b5f1-6bcc17209b2d",
    "24ab104b-fb18-3861-a569-8d377af3d5f5",
    "364cf5c3-7892-320f-b739-751b17790992",
    "e3e05809-617d-3d48-a5e8-8a3c499e180c",
    "d5f16f4d-b792-3cfe-91b5-8cad0c42ae0d",
    "b78f73c7-ebeb-371d-8ade-c2e4e89a49a8"
  ],
  "supersedes": [
    "51237064-f03d-34e9-8711-340d73b5315c",
    "ee3dfbe3-8192-3845-ba3c-6da18e9d0d04",
    "680b35e5-37a8-331d-aa50-c27252e253ba",
    "918099c5-0d05-3206-977b-6179dcca8058",
    "2d8664f5-f5ec-3d85-afaf-9f9258e261e5",
    "70e76921-4c50-3822-9c9e-25351fde3601",
    "c6e73f83-e73e-3f01-9a97-1de3111437b4",
    "ced6e0e8-910b-390b-91de-1dc78f71fa51",
    "5c307ece-ec15-3387-86b3-9bf3758babca",
    "896c6047-700e-3fe3-8a84-032e8b7059be",
    "03d06861-435c-3f79-8ab1-16c9d96d5f02",
    "ebc193d0-73f7-3b3b-83df-5178fbb2488e",
    "1e830ef1-5db8-31f2-8a44-824ce58da57e",
    "51ddf79e-813d-3d4f-98ec-dd5287d1b5ee",
    "8e210493-d41e-3b0f-8df6-e2536f81b9f2",
    "67008f0a-486c-35ca-990c-5e52ea39f7f1",
    "cdb64192-1f32-3552-8d8e-83fd118ad11b",
    "20ee87bd-51b6-3783-ac04-39f502267217"
  ],
],

```

```
"title": "Servicing stack update for Windows 10, version 1903 and  
1909: August 11, 2020 (KB4569073)",  
"type": "OS",  
"vendor": "Microsoft",  
"vendorSeverity": "Critical",  
"vendorlink": "http://support.microsoft.com/kb/4569073",  
"missingCount": 0,  
"installedCount": 1,  
"downloadMethod": "Automatic",  
"advisory": null,  
"id": "802b47fe-586e-320d-8275-22503ef65d9d",  
"isSecurity": true,  
"isSuperseded": true,  
"isRollback": false  
}  
]
```

Scan Result Asset

Get a List of Assets

`/rest/pm/v1/assets`

[GET]

Use this API to get a list of assets enabled for your Patch Management within your scope.

Input Parameters

Parameter	Description
havingQuery (string)	(Optional) Specify a QQL to filter assets based on patch catalog search criteria. For example, appFamily:Firefox
pageNumber (string)	(Optional) The page to be returned. The default value is 0.
pageSize (string)	(Optional) Limit number of rows to be returned per page, the default value is 10.
platform (string)	(Optional) The platform type. - Available values: Linux, Windows - Default value: Windows
query (string)	(Optional) Specify a QQL to filter assets based on asset search criteria. For example, name:'Asset-windowsmachine1' Append the QQL (patchStatus:[Missing,Installed] and isSuperseded:false) to filter the latest missing and

installed patches.

sort (string) (Optional) Sort the patch values by certain data.

For examples, [{"name": "asc"}]

Sample - Get a list of assets in your scope

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/assets?havingQuery=isSecurity%3A%20true
&pageNumber=0&pageSize=2&platform=Windows&query=%28scanDateTime%3A%5Bnow-
2d%20...%20now-
1s%5D%29%20and%20%28patchStatus%3A%5BMissing%5D%20and%20isSuperseded%3
A%20false%29&sort=%5B%7B%22status%22%3A%22asc%22%7D%5D" -H "accept:
application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
[
  {
    "name": "WIN2012R2",
    "id": "a676efcf-8322-4fdc-b3b5-f3ed44f955a5",
    "operatingSystem": "Microsoft Windows Server 2012 R2 Standard
6.3.9600 64-bit N/A Build 9600",
    "lastLoggedOnUser": "Administrator",
    "scanStatus": "Scanned",
    "statusCode": 20211,
    "statusDateTime": 1642692958139,
    "scanDateTime": 1642692969154,
    "hardware": {
      "model": "",
      "manufacturer": ""
    },
    "tags": [
      {
        "id": "781270dc-02ba-45c3-9336-78edf4802c1d"
      },
      {
        "id": "65a57156-c983-4c5c-bc6b-4cf8585e894f"
      },
      {
        "id": "67978b5c-a9ef-4c02-b4ae-dc6f0f825063"
```

```
    },
    {
      "id": "59e00be0-1feb-46d5-80d9-980d80d4f032"
    },
    {
      "id": "8302ecad-4518-4fce-bce3-8ea764cd1e7c"
    }
  ],
  "interfaces": [],
  "version": "Microsoft Windows Server 2012 R2 Standard 6.3.9600
Build 9600",
  "architecture": "x64",
  "osIdentifier": "WINDOWS",
  "platform": "Windows",
  "missingCount": 274,
  "installedCount": 6
}
]
```


Deployment Job

Get Deployment by Job ID

/rest/pm/v1/deploymentjob/{deploymentJobId}

[GET]

Use this API to get details of the deployment job based on the provided deployment job ID.

Input Parameters

Parameter	Description
deploymentJobId (string)	(Required) Deployment job ID for which you want to fetch details.

Sample - Get details for a job using the job ID

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/deploymentjob/330b9957-9434-4042-9d67-9a3260b6de45" -H "accept: application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
{
  "customerId": "6f66747e-2800-7fc7-82d4-1ee7cd30c9fc",
  "id": "330b9957-9434-4042-9d67-9a3260b6de45",
  "schemaVersion": "1.0",
  "name": "Test pre-post_2",
  "type": "Install",
  "status": "Completed",
  "assetIds": [
    "a676efcf-8322-4fdc-b3b5-f3ed44f955a5"
  ],
}
```

```

"assetTagIds": null,
"matchAllTagIds": null,
"exclusionTagIds": null,
"exclusionAssetIds": null,
"coAuthorUserIds": null,
"approvedPatches": [
  "49375711-2fb4-3286-a26b-73e2e86ec069"
],
"disabledPatches": null,
"patchCount": 1,
"scheduleType": "On-demand",
"startDateTime": "2021-12-14 01:13:24 PM",
"recurring": false,
"recurringWeekDays": "",
"dayOfMonth": null,
"recurringDayOfMonth": null,
"recurringWeekDayOfMonth": null,
"timezoneType": "SPECIFIC_TZ",
"timezone": "UTC",
"timeout": -1,
"timeoutUnit": "HOURS",
"preDeployment": {
  "userMessage": "",
  "description": "",
  "deferment": {
    "count": 3,
    "interval": 1,
    "intervalUnit": "HOURS"
  }
},
"duringDeployment": {
  "userMessage": "",
  "description": ""
},
"postDeployment": {
  "suppressReboots": false,
  "rebootOption": {
    "userMessage": "",
    "description": "",
    "deferment": {
      "count": 3,
      "interval": 1,
      "intervalUnit": "HOURS"
    }
  }
},
"rebootCountdown": {

```

```

    "interval": 15,
    "intervalUnit": "MINUTES",
    "userMessage": "Reboot countdown started",
    "description": "The system reboot is initiated. It will reboot
automatically after the timer countdown."
  },
  "onComplete": {
    "userMessage": "",
    "description": ""
  }
},
"description": "",
"createdBy": {
  "user": {
    "id": "ea9067e4-1c28-e208-80b4-312b7a0449cf",
    "name": "gtham_bw"
  },
  "date": 1639487598431
},
"updatedBy": {
  "user": null,
  "date": 1639487913081
},
"deletedBy": {
  "user": null,
  "date": null
},
"assetCount": null,
"opportunisticDownloads": false,
"filterType": "Any",
"exclusionFilterType": "Any",
"taggedAssetCount": 0,
"minimizeWindow": false,
"dynamicPatchesQQL": "",
"isDynamicPatchesQQL": false,
"dynamicQQLType": 1,
"platform": "Windows",
"continueOnPatchFailure": false,
"preDeployActions": [
  {
    "action": "Change Registry Key",
    "actionId": "0ffc4ac7-9b68-49f0-805f-5ec187421d06",
    "actionType": "predeploy",
    "params": {
      "actionItem": "abc",
      "regKey": "SEtMTS9zb2Z0d2FyZS9zYWdhcg==",

```

```
    "regValueType": "REG_BINARY",
    "regValue": "MA==",
    "regKeyAddNew": true
  }
},
{
  "action": "Run Script",
  "actionId": "76a7b38c-19be-47c7-88a6-22d5f3325f9c",
  "actionType": "predeploy",
  "params": {
    "actionItem": "S1"
  },
  "script": "bHMgLWFs",
  "scriptType": "ps"
}
],
"postDeployActions": null,
"applicableAssetCount": 1,
"monthlyRecurringType": null,
"patchTuesdayPlusXDays": null,
"recurringLastDayOfMonth": false,
"jobCategory": 3,
"jobTriggerStatus": 1,
"completionPercent": 100,
"totalAssetCount": 1,
"assetResultReceivedCount": 1,
"jobSource": 2,
"readOnly": false
}
```

Create a Deployment Job

/rest/pm/v1/deploymentjob

[POST]

Use this API to create a deployment job by providing inputs in the request body.

[Input Parameters](#)

[Sample - Create a Windows on-demand deployment job with preactions and post actions](#)

[Sample - Create Windows QQL-based installation job for Patch Tuesday without actions](#)

[Sample - Create a Windows uninstall job](#)

[Sample - Create a Linux installation job](#)

Input Parameters

Parameter	Description
approvedPatches (string)	(Optional) Specify a list of patches that you want to add to the job
filterType (string)	(Optional) Specify the relationship between selected tags. Available values: Any, All Default value: Any
exclusionFilterType (string)	(Optional) Specify the relationship between excluded tags.

	<p>Available values: Any, All</p> <p>Default value: Any</p>
scheduleType (string)	<p>(Mandatory) Specify the schedule to run the job.</p> <p>On-demand, Once, Daily, Weekly, Monthly</p>
startDateTime (string)	<p>Specify the time to start the job.</p> <p>(Optional) On-demand job</p> <p>(Mandatory) for other job types</p> <p>Format example: 2022-2-20 01:18:30 PM</p>
recurring (boolean)	<p>(Optional) Specify if the job is recurring.</p> <p>Available values, True, False</p>
dayOfMonth (string)	<p>(Optional) Specify a day between 1 to 31 to run the job.</p>
recurringLastDayOfMonth (boolean)	<p>(Optional) Specify if you want to job to run on the last day of the month.</p> <p>Available values, True, False</p>
monthlyRecurringType (string)	<p>(Optional) Specify if you want to run the job on the Patch Tuesday schedule</p> <p>Available value: 0 (not - Patch Tuesday) , 1 (Patch Tuesday)</p> <p>Default value: 0</p>
patchTuesdayPlusXDays (string)	<p>(Optional) Specify a value between 1 to 27 based on when you want to run the Patch Tuesday schedule job.</p>
recurringDayOfMonth	<p>(Optional) Specify a value between 1 to 5</p>

(string)	<p>to run the job on a specific day of a week in the month.</p> <p>For example, the second Monday of the month.</p>
recurringWeekDayOfMonth (string)	<p>(Optional) Specify a value between 0-6 to run a job on a specific day of the week.</p> <p>For example, 0=Sunday, 1=Monday, and so on.</p>
recurringWeekDays (string)	<p>(Optional) Replace 0 with 1 in the "0,0,0,0,0,0,0" sequence to run the job on a specific day of the week.</p> <p>For example, "0,0,1,0,0,0,0" to run the job on Tuesday.</p>
dynamicQLLType (string)	<p>(Optional) Specify if the job is QQL type.</p> <p>Available values: 0 (no QQL), 1 (Patch QQL), 2 (Vulnerability QQL)</p> <p>Default value: 0</p>
isDynamicPatchesQQL (boolean)	<p>(Optional) Specify if the QQL-job uses Patches tokens.</p> <p>Available values: True, False</p>
continueOnPatchFailure (boolean, for Linux job only)	<p>(Optional) Specify if the Linux installation job should run after a patch in the package fails to install.</p> <p>Available values: True, False</p>
preDeployment (string)	<p>(Optional) Specify a message you want to show before the deployment starts. If you don't want to show a message, keep the value as null.</p>

duringDeployment (string) (Optional) Specify a message you want to show before the deployment starts. If you don't want to show a message, keep the value null.

postDeployment (string) (Optional) Specify a message you want to show after the job is deployed. If you don't want to show a message, keep the value null.

onComplete (string) (Optional) Specify a message you want to show after the job is complete. If you don't want to show a message, keep the value null.

rebootCountdown (string) (Optional) Specify a message you want to show before reboot countdown starts. If you don't want to show a message, keep the value null.

rebootOption (string) (Optional) Specify a message you want to show when the reboot is complete. If you don't want to show a message, keep the value null.

suppressReboots (string) (Optional) Specify if you want to allow users to suppress a reboot after the job.

Available values: True, False

Default value: False

platform (string) (Optional) Specify the platform type.

- Available values: Linux, Windows

- Default value: Windows

minimizeWindow (boolean, for Windows job only) (Optional) Specify if you want to allow users to minimize the job window.

	<p>Available values: True, False</p> <p>Default value: False</p>
type (string)	<p>(Mandatory) Specify the job type.</p> <p>Available value: Install (Windows and Linux), Uninstall (Windows only)</p> <p>Default value: Install</p>
status (string)	<p>(Optional) Specify the job status.</p> <p>Available values: Disabled, Enabled</p> <p>Default value: Disabled</p>
timeout/timeoutUnit (string)	<p>(Optional) Specify if the job should time out in hours (1 to 9) or minutes (1 to 1440)</p>
timezoneType (string)	<p>(Optional) Specify if you want to run the job in the agent time zone of a specific time zone.</p> <p>Available values: AGENT_TZ, SPECIFIC_TZ</p>
timezone (string)	<p>(Optional) Specify the time zone in which you want to run the job. To refer to the available time zones, see List of Time Zones.</p>
opportunisticDownloads (boolean, Windows job only)	<p>(Optional) Specify if you want the agent to attempt to download the patches before the job starts.</p> <p>Available values: True, False</p> <p>Default value: False</p>
action (string, Windows job only)	<p>(Optional) Specify if you want to execute</p>

an action before or after a job runs.

Available values: Run Script, Install Software

script/detectionScript (string, Windows jobs only)	(Optional) Specify the Base 64 encoded script that you want to run as an action
---	---

scriptType (string, Windows job only)	(Optional) Specify the Powershell script that you want to run as a part of the job.
---------------------------------------	---

detectionScriptType -(string, Windows job only)	(Optional) Specify the Powershell script that you want to run as a part of the job
---	--

Sample - Create a Windows on-demand deployment job with preactions and post actions

API request

```
curl -X POST
"https://<QualysBaseURL>/pm/v1/deploymentjob" -" -H "accept:
application/json"-H "Authorization: Bearer <<jwt token>>"
```

Request Body - Specify the inputs to create a deployment job

```
{
  "name": "Public API on demand Window job with specific patches",
  "description": "Created via public API",
  "approvedPatches": [
    "ca0d50b1-df21-31ef-aa9b-eec805b3a517",
    "9285e676-6340-3ba7-b124-31d84542c7bf"
  ],
  "assetIds": [
    "bdf79678-e0f3-4c96-9d5c-59b14661ec3f"
  ],
  "assetTagIds": [
    "976d805d-855f-4aa7-8713-b44463f7d081"
  ],
  "filterType": "Any",
  "exclusionAssetIds": [
    "e52de00f-8631-4dd5-9ff7-622f3e8d698d"
  ]
}
```

```

],
"exclusionFilterType": "Any",
"exclusionTagIds": [
"22dc264-9c2a-4d78-bc55-376396b68a08"
],
"coAuthorUserIds": [
"568be9b8-cbbb-47bf-8132-e4f3c2c46e6c"
],
"preDeployment": null,
"duringDeployment": {
"description": "During deployment Description",
"userMessage": "During deployment userMessage"
},
"postDeployment": {
"onComplete": {
"description": "On complete Description",
"userMessage": "On complete userMessage"
},
"rebootCountdown": {
"interval": 15,
"intervalUnit": "MINUTES",
"userMessage": "Reboot Countdown usermessage",
"description": "Reboot Countdown description"
},
"rebootOption": {
"deferment": {
"count": 3,
"interval": 1,
"intervalUnit": "HOURS"
},
"description": "rebootOption description",
"userMessage": "rebootOption user message"
},
"suppressReboots": false
},
"platform": "Windows",
"minimizeWindow": "true",
"type": "Install",
"status": "Disabled",
"timeout": 6,
"timeoutUnit": "HOURS",
"recurring": false,
"scheduleType": "On-demand",
"opportunisticDownloads": false,
"preDeployActions": [
{

```

```

        "action": "Run Script",
        "params": {
            "actionItem": "S1"
        },
        "script": "bHM=",
        "scriptType": "ps"
    }
],
"postDeployActions": [
    {
        "action": "Install Software",
        "params": {
            "actionItem": "Install1",
            "downloadURL": "https://abc.com",
            "fileChecksum": "1234556"
        },
        "detectionScript": "bHM=",
        "detectionScriptType": "ps",
        "script": "bHM=",
        "scriptType": "ps"
    }
]
}

```

Response

```

{
  "customerId": "6f66747e-2800-7fc7-82d4-1ee7cd30c9fc",
  "id": "d8550c74-0f36-4319-aabd-fe51ac3a38d9",
  "schemaVersion": "1.0",
  "name": "Public API on demand Window job with specific patches",
  "type": "Install",
  "status": "Disabled",
  "assetIds": [
    "bdf79678-e0f3-4c96-9d5c-59b14661ec3f"
  ],
  "assetTagIds": [
    "976d805d-855f-4aa7-8713-b44463f7d081"
  ],
  "matchAllTagIds": null,
  "exclusionTagIds": [
    "22dcb264-9c2a-4d78-bc55-376396b68a08"
  ],
  "exclusionAssetIds": [
    "e52de00f-8631-4dd5-9ff7-622f3e8d698d"
  ],
}

```

```

"coAuthorUserIds": [
  "568be9b8-cbbb-47bf-8132-e4f3c2c46e6c"
],
"approvedPatches": [
  "ca0d50b1-df21-31ef-aa9b-eec805b3a517",
  "9285e676-6340-3ba7-b124-31d84542c7bf"
],
"disabledPatches": null,
"patchCount": 2,
"scheduleType": "On-demand",
"startDateTime": "2022-2-22 01:33:10 PM",
"recurring": false,
"recurringWeekDays": null,
"dayOfMonth": null,
"recurringDayOfMonth": null,
"recurringWeekDayOfMonth": null,
"timezoneType": "SPECIFIC_TZ",
"timezone": "UTC",
"timeout": 6,
"timeoutUnit": "HOURS",
"preDeployment": {
  "userMessage": "",
  "description": "",
  "deferment": {
    "count": 3,
    "interval": 1,
    "intervalUnit": "HOURS"
  }
},
"duringDeployment": {
  "userMessage": "During deployment userMessage",
  "description": "During deployment Description"
},
"postDeployment": {
  "suppressReboots": false,
  "rebootOption": {
    "userMessage": "rebootOption user message",
    "description": "rebootOption description",
    "deferment": {
      "count": 3,
      "interval": 1,
      "intervalUnit": "HOURS"
    }
  }
},
"rebootCountdown": {
  "interval": 15,

```

```

        "intervalUnit": "MINUTES",
        "userMessage": "Reboot Countdown usermessage",
        "description": "Reboot Countdown description"
    },
    "onComplete": {
        "userMessage": "On complete userMessage",
        "description": "On complete Description"
    }
},
"description": "Created via public API",
"createdBy": {
    "user": {
        "id": "ea9067e4-1c28-e208-80b4-312b7a0449cf",
        "name": "gtham_bw"
    },
    "date": 1645536790291
},
"updatedBy": {
    "user": null,
    "date": null
},
"deletedBy": {
    "user": null,
    "date": null
},
"assetCount": null,
"opportunisticDownloads": false,
"filterType": "Any",
"exclusionFilterType": "Any",
"taggedAssetCount": 0,
"minimizeWindow": true,
"dynamicPatchesQQL": null,
"isDynamicPatchesQQL": null,
"dynamicQQLType": null,
"platform": "Windows",
"continueOnPatchFailure": false,
"preDeployActions": null,
"postDeployActions": null,
"applicableAssetCount": 0,
"monthlyRecurringType": null,
"patchTuesdayPlusXDays": null,
"recurringLastDayOfMonth": null,
"jobCategory": 3,
"jobTriggerStatus": null,
"completionPercent": null,
"totalAssetCount": null,

```

```

"assetResultReceivedCount": null,
"jobSource": 3,
"readOnly": false
}

```

Sample - Create Windows QQL-based installation job for Patch Tuesday without actions

API request

```

curl -X POST
"https://<QualysBaseURL>/pm/v1/deploymentjob" -" -H "accept:
application/json"-H "Authorization: Bearer <<jwt token>>"

```

Request Body - Specify the inputs to create a deployment job

```

-d '{
  "name": "Winodws Public API job 3",
  "description": "Winodws job created via public API",
  "approvedPatches": [],
  "assetIds": [
    "bdf79678-e0f3-4c96-9d5c-59b14661ec3f"
  ],
  "assetTagIds": [
    "976d805d-855f-4aa7-8713-b44463f7d081"
  ],
  "matchAllTagIds": [],
  "filterType": "Any",
  "exclusionAssetIds": [
    "e52de00f-8631-4dd5-9ff7-622f3e8d698d"
  ],
  "exclusionFilterType": "Any",
  "exclusionTagIds": [
    "22dcb264-9c2a-4d78-bc55-376396b68a08"
  ],
  "coAuthorUserIds": [
    "568be9b8-cbbb-47bf-8132-e4f3c2c46e6c"
  ],

  "scheduleType": "Monthly",
  "startDateTime": "2022-2-20 01:18:30 PM",
  "recurring": true,

  "dayOfMonth": null,
  "recurringLastDayOfMonth": false,

```

```

"monthlyRecurringType": 1,
"patchTuesdayPlusXDays": 6,

"recurringDayOfMonth": null,
"recurringWeekDayOfMonth": null,

"recurringWeekDays": "",

"dynamicPatchesQQL": "isSecurity: true",
"dynamicQQLType": "1",
"isDynamicPatchesQQL": true,

"continueOnPatchFailure": false,
"preDeployment": {
  "deferment": {
    "count": 3,
    "interval": 1,
    "intervalUnit": "HOURS"
  },
  "description": "preDeployment description",
  "userMessage": "preDeployment user message"
},
"duringDeployment": {
  "description": "During deployment Description",
  "userMessage": "During deployment userMessage"
},
"postDeployment": {
  "onComplete": {
    "description": "On complete Description",
    "userMessage": "On complete userMessage"
  },
  "rebootCountdown": {
    "interval": 15,
    "intervalUnit": "MINUTES",
    "userMessage": "Reboot Countdown usermessage",
    "description": "Reboot Countdown description"
  },
  "rebootOption": {
    "deferment": {
      "count": 3,
      "interval": 1,
      "intervalUnit": "HOURS"
    },
    "description": "rebootOption description",
    "userMessage": "rebootOption user message"
  }
}

```



```

    },
    "suppressReboots": false
  },
  "platform": "Windows",
  "minimizeWindow": "true",
  "type": "Install",
  "status": "Disabled",
  "timeout": 6,
  "timeoutUnit": "HOURS",

  "timezone": null,
  "timezoneType": "AGENT_TZ",
  "opportunisticDownloads": true
}'

```

Response

```

{
  "customerId": "6f66747e-2800-7fc7-82d4-1ee7cd30c9fc",
  "id": "7dc64a73-f347-4ed4-b50c-9c645b334907",
  "schemaVersion": "1.0",
  "name": "Winodws Public API job 3",
  "type": "Install",
  "status": "Disabled",
  "assetIds": [
    "bdf79678-e0f3-4c96-9d5c-59b14661ec3f"
  ],
  "assetTagIds": [
    "976d805d-855f-4aa7-8713-b44463f7d081"
  ],
  "matchAllTagIds": [],
  "exclusionTagIds": [
    "22dcb264-9c2a-4d78-bc55-376396b68a08"
  ],
  "exclusionAssetIds": [
    "e52de00f-8631-4dd5-9ff7-622f3e8d698d"
  ],
  "coAuthorUserIds": [
    "568be9b8-cbbb-47bf-8132-e4f3c2c46e6c"
  ],
  "approvedPatches": [],
  "disabledPatches": null,
  "patchCount": 0,
  "scheduleType": "Monthly",
  "startDateTime": "2022-2-20 01:18:30 PM",
  "recurring": true,

```

```

"recurringWeekDays": "",
"dayOfMonth": null,
"recurringDayOfMonth": null,
"recurringWeekDayOfMonth": null,
"timezoneType": "AGENT_TZ",
"timezone": null,
"timeout": 6,
"timeoutUnit": "HOURS",
"preDeployment": {
  "userMessage": "preDeployment user message",
  "description": "preDeployment description",
  "deferment": {
    "count": 3,
    "interval": 1,
    "intervalUnit": "HOURS"
  }
},
"duringDeployment": {
  "userMessage": "During deployment userMessage",
  "description": "During deployment Description"
},
"postDeployment": {
  "suppressReboots": false,
  "rebootOption": {
    "userMessage": "rebootOption user message",
    "description": "rebootOption description",
    "deferment": {
      "count": 3,
      "interval": 1,
      "intervalUnit": "HOURS"
    }
  }
},
"rebootCountdown": {
  "interval": 15,
  "intervalUnit": "MINUTES",
  "userMessage": "Reboot Countdown usermessage",
  "description": "Reboot Countdown description"
},
"onComplete": {
  "userMessage": "On complete userMessage",
  "description": "On complete Description"
}
},
"description": "Winodws job created via public API",
"createdBy": {
  "user": {

```

```

        "id": "ea9067e4-1c28-e208-80b4-312b7a0449cf",
        "name": "gtham_bw"
    },
    "date": 1645970995557
},
"updatedBy": {
    "user": null,
    "date": null
},
"deletedBy": {
    "user": null,
    "date": null
},
"assetCount": null,
"opportunisticDownloads": true,
"filterType": "Any",
"exclusionFilterType": "Any",
"taggedAssetCount": 0,
"minimizeWindow": true,
"dynamicPatchesQQL": "isSecurity: true",
"isDynamicPatchesQQL": true,
"dynamicQQLType": 1,
"platform": "Windows",
"continueOnPatchFailure": false,
"preDeployActions": null,
"postDeployActions": null,
"applicableAssetCount": 0,
"monthlyRecurringType": 1,
"patchTuesdayPlusXDays": 6,
"recurringLastDayOfMonth": false,
"jobCategory": 1,
"jobTriggerStatus": null,
"completionPercent": null,
"totalAssetCount": null,
"assetResultReceivedCount": null,
"jobSource": 3,
"readOnly": false
}

```

Sample - Create a Windows uninstall job

API request

```
curl -X POST
```

```
"https://<QualysBaseURL>/pm/v1/deploymentjob" -" -H "accept:
application/json"-H "Authorization: Bearer <<jwt token>>"
```

Request Body - Specify the inputs to create a uninstall job

```
-d '{
  "name": "Winodws Public API job 5",
  "description": "Winodws job created via public API",
  "approvedPatches": [
    "ca0d50b1-df21-31ef-aa9b-eec805b3a517",
    "9285e676-6340-3ba7-b124-31d84542c7bf"
  ],
  "assetIds": [
    "bdf79678-e0f3-4c96-9d5c-59b14661ec3f"
  ],
  "assetTagIds": [
    "976d805d-855f-4aa7-8713-b44463f7d081"
  ],
  "matchAllTagIds": [],
  "filterType": "Any",
  "exclusionAssetIds": [
    "e52de00f-8631-4dd5-9ff7-622f3e8d698d"
  ],
  "exclusionFilterType": "Any",
  "exclusionTagIds": [
    "22dcb264-9c2a-4d78-bc55-376396b68a08"
  ],
  "coAuthorUserIds": [
    "568be9b8-cbbb-47bf-8132-e4f3c2c46e6c"
  ],
  "dayOfMonth": null,
  "recurringLastDayOfMonth": false,
  "monthlyRecurringType": 0,
  "patchTuesdayPlusXDays": null,
  "recurringDayOfMonth": null,
  "recurringWeekDayOfMonth": null,
  "recurringWeekDays": "",
  "dynamicPatchesQQL": null,
  "dynamicQQLType": "1",
  "isDynamicPatchesQQL": false,
```

```

"continueOnPatchFailure": false,
"preDeployment": {
  "deferment": {
    "count": 3,
    "interval": 1,
    "intervalUnit": "HOURS"
  },
  "description": "preDeployment description",
  "userMessage": "preDeployment user message"
},
"duringDeployment": {
  "description": "During deployment Description",
  "userMessage": "During deployment userMessage"
},
"postDeployment": {
  "onComplete": {
    "description": "On complete Description",
    "userMessage": "On complete userMessage"
  },
  "rebootCountdown": {
    "interval": 15,
    "intervalUnit": "MINUTES",
    "userMessage": "Reboot Countdown usermessage",
    "description": "Reboot Countdown description"
  },
  "rebootOption": {
    "deferment": {
      "count": 3,
      "interval": 1,
      "intervalUnit": "HOURS"
    },
    "description": "rebootOption description",
    "userMessage": "rebootOption user message"
  },
  "suppressReboots": false
},
"platform": "Windows",
"minimizeWindow": "true",
"type": "Uninstall",
"status": "Disabled",
"timeout": 6,
"timeoutUnit": "HOURS",
"recurring": false,
"scheduleType": "On-demand",
"timezone": null,
"timezoneType": null,

```

```
'
  "startDateTime": null,
  "opportunisticDownloads": false
}'
```

Response

```
{
  "customerId": "6f66747e-2800-7fc7-82d4-1ee7cd30c9fc",
  "id": "ec3fb8b4-2df5-467e-8ab4-0cd84aec3382",
  "schemaVersion": "1.0",
  "name": "Winodws Public API job 5",
  "type": "Uninstall",
  "status": "Disabled",
  "assetIds": [
    "bdf79678-e0f3-4c96-9d5c-59b14661ec3f"
  ],
  "assetTagIds": [
    "976d805d-855f-4aa7-8713-b44463f7d081"
  ],
  "matchAllTagIds": [],
  "exclusionTagIds": [
    "22dcb264-9c2a-4d78-bc55-376396b68a08"
  ],
  "exclusionAssetIds": [
    "e52de00f-8631-4dd5-9ff7-622f3e8d698d"
  ],
  "coAuthorUserIds": [
    "568be9b8-cbbb-47bf-8132-e4f3c2c46e6c"
  ],
  "approvedPatches": [],
  "disabledPatches": null,
  "patchCount": 0,
  "scheduleType": "On-demand",
  "startDateTime": "2022-2-27 03:04:46 PM",
  "recurring": false,
  "recurringWeekDays": "",
  "dayOfMonth": null,
  "recurringDayOfMonth": null,
  "recurringWeekDayOfMonth": null,
  "timezoneType": "SPECIFIC_TZ",
  "timezone": "UTC",
  "timeout": 6,
  "timeoutUnit": "HOURS",
  "preDeployment": {
    "userMessage": "preDeployment user message",
    "description": "preDeployment description",
```

```

    "deferment": {
      "count": 3,
      "interval": 1,
      "intervalUnit": "HOURS"
    }
  },
  "duringDeployment": {
    "userMessage": "During deployment userMessage",
    "description": "During deployment Description"
  },
  "postDeployment": {
    "suppressReboots": false,
    "rebootOption": {
      "userMessage": "rebootOption user message",
      "description": "rebootOption description",
      "deferment": {
        "count": 3,
        "interval": 1,
        "intervalUnit": "HOURS"
      }
    }
  },
  "rebootCountdown": {
    "interval": 15,
    "intervalUnit": "MINUTES",
    "userMessage": "Reboot Countdown usermessage",
    "description": "Reboot Countdown description"
  },
  "onComplete": {
    "userMessage": "On complete userMessage",
    "description": "On complete Description"
  }
},
"description": "Winodws job created via public API",
"createdBy": {
  "user": {
    "id": "ea9067e4-1c28-e208-80b4-312b7a0449cf",
    "name": "gtham_bw"
  },
  "date": 1645974285950
},
"updatedBy": {
  "user": null,
  "date": null
},
"deletedBy": {
  "user": null,

```

```

    "date": null
  },
  "assetCount": null,
  "opportunisticDownloads": false,
  "filterType": "Any",
  "exclusionFilterType": "Any",
  "taggedAssetCount": 0,
  "minimizeWindow": true,
  "dynamicPatchesQQL": null,
  "isDynamicPatchesQQL": false,
  "dynamicQQLType": 1,
  "platform": "Windows",
  "continueOnPatchFailure": false,
  "preDeployActions": null,
  "postDeployActions": null,
  "applicableAssetCount": 0,
  "monthlyRecurringType": null,
  "patchTuesdayPlusXDays": null,
  "recurringLastDayOfMonth": false,
  "jobCategory": 3,
  "jobTriggerStatus": null,
  "completionPercent": null,
  "totalAssetCount": null,
  "assetResultReceivedCount": null,
  "jobSource": 3,
  "readOnly": false
}

```

Sample - Create a Linux installation job

API request

```

curl -X POST
"https://<QualysBaseURL>/pm/v1/deploymentjob" -" -H "accept:
application/json"-H "Authorization: Bearer <<jwt token>>"

```

Request Body - Specify the inputs to create a deployment job

```

-d '{
  "name": "Public API on demand Linux job with patches",
  "description": "Created via public API",
  "approvedPatches": [
    "58aa4edc-48c8-35fd-88bb-f0500c0b869b",
    "150810de-6165-3012-9758-1ca26192d9aa"
  ],
}

```



```

"assetIds": [
  "b4486cbb-2fed-482f-ad37-7eab73f4d79d"
],
"assetTagIds": [
  "976d805d-855f-4aa7-8713-b44463f7d081"
],
"filterType": "Any",
"exclusionAssetIds": [
  "5e87409a-4b65-4766-8802-b7b9efd439ae"
],
"exclusionFilterType": "Any",
"exclusionTagIds": [
  "22dcb264-9c2a-4d78-bc55-376396b68a08"
],
"coAuthorUserIds": [
  "568be9b8-cbbb-47bf-8132-e4f3c2c46e6c"
],
"preDeployment": null,
"duringDeployment": null,
"postDeployment": {
  "onComplete": null,
  "rebootCountdown": {
    "interval": 15,
    "intervalUnit": "MINUTES",
    "userMessage": "Reboot Countdown usermessage",
    "description": "Reboot Countdown description"
  },
  "rebootOption": null,
  "suppressReboots": false
},
"platform": "Linux",
"type": "Install",
"status": "Disabled",
"timeout": 6,
"timeoutUnit": "HOURS",
"recurring": false,
"scheduleType": "On-demand",
"opportunisticDownloads": false
}'

```

Response

```

{
  "customerId": "6f66747e-2800-7fc7-82d4-1ee7cd30c9fc",
  "id": "adbf179f-e576-468e-96a1-695cc8ac03d9",
  "schemaVersion": "1.0",

```

```

"name": "Public API on demand Linux job with patches",
"type": "Install",
"status": "Disabled",
"assetIds": [
  "b4486cbb-2fed-482f-ad37-7eab73f4d79d"
],
"assetTagIds": [
  "976d805d-855f-4aa7-8713-b44463f7d081"
],
"matchAllTagIds": null,
"exclusionTagIds": [
  "22dcb264-9c2a-4d78-bc55-376396b68a08"
],
"exclusionAssetIds": [
  "5e87409a-4b65-4766-8802-b7b9efd439ae"
],
"coAuthorUserIds": [
  "568be9b8-cbbb-47bf-8132-e4f3c2c46e6c"
],
"approvedPatches": [
  "150810de-6165-3012-9758-1ca26192d9aa",
  "58aa4edc-48c8-35fd-88bb-f0500c0b869b"
],
"disabledPatches": null,
"patchCount": 2,
"scheduleType": "On-demand",
"startDateTime": "2022-2-21 09:46:28 AM",
"recurring": false,
"recurringWeekDays": null,
"dayOfMonth": null,
"recurringDayOfMonth": null,
"recurringWeekDayOfMonth": null,
"timezoneType": "SPECIFIC_TZ",
"timezone": "UTC",
"timeout": 6,
"timeoutUnit": "HOURS",
"preDeployment": {
  "userMessage": "",
  "description": "",
  "deferment": {
    "count": 3,
    "interval": 1,
    "intervalUnit": "HOURS"
  }
},
"duringDeployment": {

```

```

    "userMessage": "",
    "description": ""
  },
  "postDeployment": {
    "suppressReboots": false,
    "rebootOption": {
      "userMessage": "",
      "description": "",
      "deferment": {
        "count": 3,
        "interval": 1,
        "intervalUnit": "HOURS"
      }
    }
  },
  "rebootCountdown": {
    "interval": 15,
    "intervalUnit": "MINUTES",
    "userMessage": "Reboot Countdown usermessage",
    "description": "Reboot Countdown description"
  },
  "onComplete": {
    "userMessage": "",
    "description": ""
  }
},
"description": "Created via public API",
"createdBy": {
  "user": {
    "id": "ea9067e4-1c28-e208-80b4-312b7a0449cf",
    "name": "gtham_bw"
  },
  "date": 1645436788291
},
"updatedBy": {
  "user": null,
  "date": null
},
"deletedBy": {
  "user": null,
  "date": null
},
"assetCount": null,
"opportunisticDownloads": false,
"filterType": "Any",
"exclusionFilterType": "Any",
>taggedAssetCount": 0,

```

```
"minimizeWindow": null,  
"dynamicPatchesQQL": null,  
"isDynamicPatchesQQL": null,  
"dynamicQQLType": null,  
"platform": "Linux",  
"continueOnPatchFailure": false,  
"preDeployActions": null,  
"postDeployActions": null,  
"applicableAssetCount": 0,  
"monthlyRecurringType": null,  
"patchTuesdayPlusXDays": null,  
"recurringLastDayOfMonth": null,  
"jobCategory": 3,  
"jobTriggerStatus": null,  
"completionPercent": null,  
"totalAssetCount": null,  
"assetResultReceivedCount": null,  
"jobSource": 3,  
"readOnly"
```

Get Deployment Job List

/rest/pm/v1/deploymentjobs

[GET]

Use this API to get a detailed list of deployment jobs created by you or for which you are a co-author.

Input Parameters

Parameter	Description
attributes (string)	(Optional) From all attributes, specify comma-separated string of attributes that you want to fetch in the response.
coauthorJob (boolean)	(Optional) Specify the co-author for the deployment. The default value is false.
filter (string)	(Optional) Specify the QQL to filter jobs based on deployment jobs search criteria. For example, status:Completed
ownedJob (boolean)	(Optional) Get the jobs that are owned by you. The default value is false.
pageNumber (string)	(Optional) The page to be returned. The default value is 0.
pageSize (string)	(Optional) Limit number of rows to be returned per page, the default value is 10.
platform (string)	(Optional)The platform type. - Available values: Linux, Windows - Default value: Windows

sort (string) (Optional) Sort the patch values by certain data.

For examples, [{"status": "asc"}]

Sample - Get a list of deployment job in your scope

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/deploymentjobs?attributes=id%2C%20name%
2C%20type&coauthorJob=true&
filter=isRecurring%3A%20true&ownedJob=true&pageNumber=0&pageSize=5&pla
tform=Windows&sort=%5B%7B%22status%22%3A%22asc%22%7D%5D" -H "accept:
application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
[
  {
    "type": "Install",
    "id": "1b8fef71-ff29-4bad-bbde-d36e90099962",
    "name": "Test job for sync"
  },
  {
    "type": "Install",
    "id": "42ad866e-f009-4882-bc3d-2ebb99ff04ad",
    "name": "Fwade"
  },
  {
    "type": "Install",
    "id": "cc452752-78a0-4f58-ac15-7baf4b68d447",
    "name": "windows job "
  },
  {
    "type": "Install",
    "id": "114e5a27-1a57-4ef6-a90e-704947b7efef",
    "name": "Copy_of_Test for manifest 1.4.6.0_1632401273733"
  },
  {
    "type": "Install",
    "id": "24156d6d-9aff-4bf6-b37e-6345012c4b9f",
    "name": "Beast2"
  }
]
```

Delete the Deployment Job

/rest/pm/v1/deploymentjobs

[DELETE]

Use this API to delete specified jobs using the job IDs.

Input Parameters

Parameter	Description
jobIdsToDelete (string)	(Required) Specify the job IDs that you want to delete.

Sample - Delete the specified jobs

API request

```
curl -X DELETE
"https://<QualysBaseURL>/pm/v1/deploymentjobs" -H "accept:
application/json" -H "Authorization: Bearer <<jwt token>>" -H
"Content-Type: application/json" -d "{\"ids\": [\"6020ba0f-5833-42d3-
9721-2ca70570be4b\"]}"
```

Request Body - Specify the job IDs to delete deployment jobs

```
{
  "ids": [
    "string"
  ]
}
```

Response

```
[
  {
    "id": "6020ba0f-5833-42d3-9721-2ca70570be4b",
    "name": "Patch Tuesday _3",
```

```
  "status": "success"  
}  
]
```


Get a List of All Deployment Jobs

`/rest/pm/v1/deploymentjobs/summary`

[GET]

Use this API to get a list of deployment jobs in your subscription.

Input Parameters

Parameter	Description
attributes (string)	(Optional) From all attributes, specify comma-separated string of attributes that you want to fetch in the response.
coauthorJob (boolean)	(Optional) Specify the co-author for the deployment. The default value is false.
filter (string)	(Optional) Specify the QQL to filter jobs based on deployment jobs search criteria. For example, status:Completed
ownedJob (boolean)	(Optional) Get the jobs that are owned by you. The default value is false.
pageNumber (string)	(Optional) The page to be returned. The default value is 0.
pageSize (string)	(Optional) Limit number of rows to be returned per page, the default value is 10.
platform (string)	(Optional) The platform type. - Available values: Linux, Windows - Default value: Windows

sort (string) (Optional) Sort the job list by certain data.

For examples, [{"status": "asc"}]

Sample - Get all deployment jobs in your subscription

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/deploymentjobs/summary?attributes=id%2C%20name%2C%20type&coauthorJob=false&filter=isRecurring%3A%20true&ownedJob=false&pageNumber=0&pageSize=2&platform=Windows&sort=%5B%7B%22status%22%3A%22asc%22%7D%5D" -H "accept: application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
[ {
  "type" : "Install",
  "id" : "ee9bf4ab-1f8f-4bdc-affc-d3cf4b763911",
  "name" : "Test for manifest 1.4.6.0"
}, {
  "type" : "Install",
  "id" : "e6a594ce-9590-4880-9aac-b29131cc3a5e",
  "name" : "Copy_of_Explicit 4"
} ]
```

Get Deployment Job Result Summary

/rest/pm/v1/deploymentjob/{deploymentJobId}/deploymentjobresult/summary

[GET]

Use this API to get details of the deployment job results based on the provided deployment job ID.

Input Parameters

Parameter	Description
deploymentJobId (string)	(Required) Specify the deployment job ID for which you want fetch the results
filter (string)	(Optional) Specify the QQL to filter jobs based on deployment jobs search criteria. For example, tags.name:"cloud agent"
pageNumber (string)	(Optional) The page to be returned. The default value is 0.
pageSize (string)	(Optional) Limit number of rows to be returned per page, the default value is 10.
sort (string)	(Optional) Sort the jobs by certain data. For examples, [{"status":"asc"}]

Sample - Get the job result summary for a job

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/deploymentjob/330b9957-9434-4042-9d67-9a3260b6de45/deploymentjobresult/summary?filter=status%3A%20Completed&
```

```
pageNumber=0&pageSize=10&sort=%5B%7B%22status%22%3A%22asc%22%7D%5D%20%20" -H "accept: application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
{
  "id": "330b9957-9434-4042-9d67-9a3260b6de45",
  "name": "Test pre-post_2",
  "assetCount": 1,
  "patchCount": 1,
  "createdBy": "gtham_bw",
  "createdOn": 1639487598431,
  "assets": [
    {
      "asset": {
        "id": "a676efcf-8322-4fdc-b3b5-f3ed44f955a5",
        "name": "WIN2012R2",
        "operatingSystem": "Microsoft Windows Server 2012 R2 Standard
6.3.9600 64-bit N/A Build 9600",
        "tags": [
          {
            "id": "781270dc-02ba-45c3-9336-78edf4802c1d",
            "name": null
          },
          {
            "id": "67978b5c-a9ef-4c02-b4ae-dc6f0f825063",
            "name": null
          },
          {
            "id": "59e00be0-1feb-46d5-80d9-980d80d4f032",
            "name": null
          },
          {
            "id": "8302ecad-4518-4fce-bce3-8ea764cd1e7c",
            "name": null
          }
        ],
        "lastLoggedOnUser": "Administrator",
        "successPatches": 0,
        "installedPatches": 0,
        "failedPatches": 0,
        "supersededPatches": 0,
        "notApplicablePatches": 1,
        "interfaces": [],
        "additionalFields": null
      }
    }
  ]
}
```

```
    },
    "endDateTime": 1639487894230,
    "startDateTime": 1639487612927,
    "statusDateTime": 1639487891496,
    "status": "Completed",
    "statusCode": "20360",
    "jobSentOn": 1639487600239,
    "installed": [],
    "failed": [],
    "success": [],
    "superseded": [],
    "notApplicable": [
      "49375711-2fb4-3286-a26b-73e2e86ec069"
    ],
    "skipped": [
      "49375711-2fb4-3286-a26b-73e2e86ec069"
    ],
    "agentCheckedInTime": 1642644837000,
    "failedActionsCount": 1,
    "successfulActionsCount": 0
  }
]
}
```

List of Time Zones

The following table lists the available time zones that you can use while scheduling the job.

Time Zone	Parameter Value
(GMT -12:00) GMT-12:00 (GMT-12:00 Etc/GMT+12)	Etc/GMT+12
(GMT -11:00) Samoa Standard Time (SST Pacific/Pago_Pago)	Pacific/Pago_Pago
(GMT -11:00) Samoa Standard Time (SST Pacific/Samoa)	Pacific/Samoa
(GMT -11:00) Niue Time (NUT Pacific/Niue)	Pacific/Niue
(GMT -11:00) Samoa Standard Time (SST US/Samoa)	US/Samoa
(GMT -11:00) GMT-11:00 (GMT-11:00 Etc/GMT+11)	Etc/GMT+11
(GMT -11:00) Samoa Standard Time (SST Pacific/Midway)	Pacific/Midway
(GMT -10:00) Hawaii Standard Time (HST Pacific/Honolulu)	Pacific/Honolulu
(GMT -10:00) Cook Is. Time (CKT Pacific/Rarotonga)	Pacific/Rarotonga
(GMT -10:00) Tahiti Time (TAHT Pacific/Tahiti)	Pacific/Tahiti
(GMT -10:00) Hawaii Standard Time (HST Pacific/Johnston)	Pacific/Johnston
(GMT -10:00) Hawaii Standard Time (HST US/Hawaii)	US/Hawaii
(GMT -10:00) GMT-10:00 (GMT-10:00 Etc/GMT+10)	Etc/GMT+10
(GMT -09:30) Marquesas Time (MART Pacific/Marquesas)	Pacific/Marquesas
(GMT -09:00) GMT-09:00 (GMT-09:00 Etc/GMT+9)	Etc/GMT+9

(GMT -09:00) Gambier Time (GAMT Pacific/Gambier)	Pacific/Gambier
(GMT -09:00) Hawaii Standard Time (HDT America/Atka)	America/Atka
(GMT -09:00) Hawaii Standard Time (HDT America/Adak)	America/Adak
(GMT -09:00) Hawaii Standard Time (HDT US/Aleutian)	US/Aleutian
(GMT -08:00) GMT-08:00 (GMT-08:00 Etc/GMT+8)	Etc/GMT+8
(GMT -08:00) Alaska Standard Time (AKDT US/Alaska)	US/Alaska
(GMT -0800) Alaska Standard Time (AKDT America/Juneau)	America/Juneau
(GMT -0800) Alaska Standard Time (AKDT America/Metlakatla)	America/Metlakatla
(GMT -0800) Alaska Standard Time (AKDT America/Juneau)	America/Juneau
(GMT -0800) Alaska Standard Time (AKDT America/Yakutat)	America/Yakutat
(GMT -0800) Pitcairn Standard Time (PST Pacific/Pitcairn)	Pacific/Pitcairn
(GMT -0800) Alaska Standard Time (AKDT America/Sitka)	America/Sitka
(GMT -0800) Alaska Standard Time (AKDT America/Anchorage)	America/Anchorage
(GMT -0800) Alaska Standard Time (AKDT America/Nome)	America/Nome
(GMT -0700) Pacific Standard Time (PDT Canada/Yukon)	Canada/Yukon
(GMT -0700) GMT-0700 (GMT-0700 Etc/GMT+7)	Etc/GMT+7
(GMT -0700) Mountain Standard Time (MST US/Arizona)	US/Arizona
(GMT -0700) Mountain Standard Time (MST Mexico/BajaSur)	Mexico/BajaSur
(GMT -0700) Mountain Standard Time (MST America/Dawson_Creek)	America/Dawson_Creek

(GMT -0700) Pacific Standard Time (PDT Canada/Pacific)	Canada/Pacific
(GMT -0700) Pacific Standard Time (PDT PST8PDT)	PST8PDT
(GMT -0700) Mountain Standard Time (MST America/Mazatlan)	America/Mazatlan
(GMT -0700) Pacific Standard Time (PDT America/Dawson)	America/Dawson
(GMT -0700) Pacific Standard Time (PDT Mexico/BajaNorte)	Mexico/BajaNorte
(GMT -0700) Pacific Standard Time (PDT America/Tijuana)	America/Tijuana
(GMT -0700) Mountain Standard Time (MST America/Chihuahua)	America/Chihuahua
(GMT -0700) Mountain Standard Time (MST America/Creston)	America/Creston
(GMT -0700) Mountain Standard Time (MST America/Hermosillo)	America/Hermosillo
(GMT -0700) Pacific Standard Time (PDT America/Santa_Isabel)	America/Santa_Isabel
(GMT -0700) Pacific Standard Time (PDT America/Vancouver)	America/Vancouver
(GMT -0700) Pacific Standard Time (PDT America/Ensenada)	America/Ensenada
(GMT -0700) Mountain Standard Time (MST America/Phoenix)	America/Phoenix
(GMT -0700) Pacific Standard Time (PDT America/Whitehorse)	America/Whitehorse
(GMT -0700) Mountain Standard Time (MST America/Fort_Nelson)	America/Fort_Nelson
(GMT -0700) Pacific Standard Time (PDT America/Los_Angeles)	America/Los_Angeles
(GMT -0700) Pacific Standard Time (PDT US/Pacific)	US/Pacific
(GMT -0600) Central Standard Time (CST America/El_Salvador)	America/El_Salvador
(GMT -0600) Central Standard Time (CST America/Guatemala)	America/Guatemala

(GMT -0600) Central Standard Time (CST America/Belize)	America/Belize
(GMT -0600) Central Standard Time (CST America/Managua)	America/Managua
(GMT -0600) Central Standard Time (CST America/Tegucigalpa)	America/Tegucigalpa
(GMT -0600) GMT-0600 (GMT-0600 Etc/GMT+6)	Etc/GMT+6
(GMT -0600) Central Standard Time (CST America/Regina)	America/Regina
(GMT -0600) Mountain Standard Time (MDT America/Denver)	America/Denver
(GMT -0600) Central Standard Time (CST Mexico/General)	Mexico/General
(GMT -0600) Galapagos Time (GALT Pacific/Galapagos)	Pacific/Galapagos
(GMT -0600) Mountain Standard Time (MDT America/Yellowknife)	America/Yellowknife
(GMT -0600) Central Standard Time (CST America/Swift_Current)	America/Swift_Current
(GMT -0600) Mountain Standard Time (MDT America/Inuvik)	America/Inuvik
(GMT -0600) Mountain Standard Time (MDT America/Boise)	America/Boise
(GMT -0600) Central Standard Time (CST America/Costa_Rica)	America/Costa_Rica
(GMT -0600) Mountain Standard Time (MDT MST7MDT)	MST7MDT
(GMT -0600) Central Standard Time (CST America/Monterrey)	America/Monterrey
(GMT -0600) Mountain Standard Time (MDT America/Ojinaga)	America/Ojinaga
(GMT -0600) Mountain Standard Time (MDT US/Mountain)	US/Mountain
(GMT -0600) Central Standard Time (CST America/Mexico_City)	America/Mexico_City
(GMT -0600) Mountain Standard Time (MDT America/Edmonton)	America/Edmonton

(GMT -0600) Central Standard Time (CST America/Bahia_Banderas)	America/Bahia_Banderas
(GMT -0600) Mountain Standard Time (MDT Canada/Mountain)	Canada/Mountain
(GMT -0600) Mountain Standard Time (MDT America/Cambrge_Bay)	America/Cambrge_Bay
(GMT -0600) Mountain Standard Time (MDT Navajo)	Navajo
(GMT -0600) Central Standard Time (CST America/Mera)	America/Mera
(GMT -0600) Central Standard Time (CST Canada/Saskatchewan)	Canada/Saskatchewan
(GMT -0600) Mountain Standard Time (MDT America/Shiprock)	America/Shiprock
(GMT -0500) Eastern Standard Time (EST America/Panama)	America/Panama
(GMT -0500) Central Standard Time (CDT America/Chicago)	America/Chicago
(GMT -0500) Acre Time (ACT America/Eirunepe)	America/Eirunepe
(GMT -0500) GMT-0500 (GMT-0500 Etc/GMT+5)	Etc/GMT+5
(GMT -0500) Easter Is. Time (EASST Pacific/Easter)	Pacific/Easter
(GMT -0500) Acre Time (ACT America/Porto_Acre)	America/Porto_Acre
(GMT -0500) Ecuador Time (ECT America/Guayaquil)	America/Guayaquil
(GMT -0500) Central Standard Time (CDT America/Rankin_Inlet)	America/Rankin_Inlet
(GMT -0500) Central Standard Time (CDT US/Central)	US/Central
(GMT -0500) Central Standard Time (CDT America/Rainy_River)	America/Rainy_River
(GMT -0500) Central Standard Time (CDT America/Indiana/Knox)	America/Indiana/Knox
(GMT -0500) Central Standard Time (CDT America/North_Dakota/Beulah)	America/North_Dakota/Beulah

(GMT -0500) Eastern Standard Time (EST America/Jamaica)	America/Jamaica
(GMT -0500) Eastern Standard Time (EST America/Atikokan)	America/Atikokan
(GMT -0500) Eastern Standard Time (EST America/Coral_Harbour)	America/Coral_Harbour
(GMT -0500) Central Standard Time (CDT America/North_Dakota/Center)	America/North_Dakota/Center
(GMT -0500) Eastern Standard Time (EST America/Cayman)	America/Cayman
(GMT -0500) Central Standard Time (CDT America/Indiana/Tell_City)	America/Indiana/Tell_City
(GMT -0500) Easter Is. Time (EASST Chile/EasterIsland)	Chile/EasterIsland
(GMT -0500) Central Standard Time (CDT America/Matamoros)	America/Matamoros
(GMT -0500) Central Standard Time (CDT CST6CDT)	CST6CDT
(GMT -0500) Central Standard Time (CDT America/Knox_IN)	America/Knox_IN
(GMT -0500) Colombia Time (COT America/Bogota)	America/Bogota
(GMT -0500) Central Standard Time (CDT America/Menominee)	America/Menominee
(GMT -0500) Central Standard Time (CDT America/Resolute)	America/Resolute
(GMT -0500) Central Standard Time (CDT Canada/Central)	Canada/Central
(GMT -0500) Acre Time (ACT Brazil/Acre)	Brazil/Acre
(GMT -0500) Eastern Standard Time (EST America/Cancun)	America/Cancun
(GMT -0500) Peru Time (PET America/Lima)	America/Lima
(GMT -0500) Central Standard Time (CDT US/Indiana-Starke)	US/Indiana-Starke
(GMT -0500) Acre Time (ACT America/Rio_Branco)	America/Rio_Branco

(GMT -0500) Eastern Standard Time (EST Jamaica)	Jamaica
(GMT -0500) Central Standard Time (CDT America/North_Dakota/New_Salem)	America/North_Dakota/New_Salem
(GMT -0500) Central Standard Time (CDT America/Winnipeg)	America/Winnipeg
(GMT -0400) Amazon Time (AMT America/Cuiaba)	America/Cuiaba
(GMT -0400) Atlantic Standard Time (AST America/Marigot)	America/Marigot
(GMT -0400) Eastern Standard Time (EDT America/Indiana/Petersburg)	America/Indiana/Petersburg
(GMT -0400) Eastern Standard Time (EDT America/Grand_Turk)	America/Grand_Turk
(GMT -0400) Cuba Standard Time (CDT Cuba)	Cuba
(GMT -0400) GMT-0400 (GMT-0400 Etc/GMT+4)	Etc/GMT+4
(GMT -0400) Amazon Time (AMT America/Manaus)	America/Manaus
(GMT -0400) Eastern Standard Time (EDT America/Fort_Wayne)	America/Fort_Wayne
(GMT -0400) Atlantic Standard Time (AST America/St_Thomas)	America/St_Thomas
(GMT -0400) Atlantic Standard Time (AST America/Anguilla)	America/Anguilla
(GMT -0400) Cuba Standard Time (CDT America/Havana)	America/Havana
(GMT -0400) Eastern Standard Time (EDT US/Michigan)	US/Michigan
(GMT -0400) Atlantic Standard Time (AST America/Barbados)	America/Barbados
(GMT -0400) Eastern Standard Time (EDT America/Louisville)	America/Louisville
(GMT -0400) Atlantic Standard Time (AST America/Curacao)	America/Curacao
(GMT -0400) Guyana Time (GYT America/Guyana)	America/Guyana

(GMT -0400) Atlantic Standard Time (AST America/Martinique)	America/Martinique
(GMT -0400) Atlantic Standard Time (AST America/Puerto_Rico)	America/Puerto_Rico
(GMT -0400) Atlantic Standard Time (AST America/Port_of_Spain)	America/Port_of_Spain
(GMT -0400) Eastern Standard Time (EDT America/Indiana/Vevay)	America/Indiana/Vevay
(GMT -0400) Eastern Standard Time (EDT America/Indiana/Vincennes)	America/Indiana/Vincennes
(GMT -0400) Atlantic Standard Time (AST America/Kralendijk)	America/Kralendijk
(GMT -0400) Atlantic Standard Time (AST America/Antigua)	America/Antigua
(GMT -0400) Eastern Standard Time (EDT America/Indianapolis)	America/Indianapolis
(GMT -0400) Eastern Standard Time (EDT America/Iqaluit)	America/Iqaluit
(GMT -0400) Atlantic Standard Time (AST America/St_Vincent)	America/St_Vincent
(GMT -0400) Eastern Standard Time (EDT America/Kentucky/Louisville)	America/Kentucky/Louisville
(GMT -0400) Atlantic Standard Time (AST America/Dominica)	America/Dominica
(GMT -0400) Eastern Standard Time (EDT EST5EDT)	EST5EDT
(GMT -0400) Eastern Standard Time (EDT America/Nassau)	America/Nassau
(GMT -0400) Eastern Standard Time (EDT America/Kentucky/Monticello)	America/Kentucky/Monticello
(GMT -0400) Amazon Time (AMT Brazil/West)	Brazil/West
(GMT -0400) Atlantic Standard Time (AST America/Aruba)	America/Aruba
(GMT -0400) Eastern Standard Time (EDT America/Indiana/Indianapolis)	America/Indiana/Indianapolis
(GMT -0400) Bolivia Time (BOT America/La_Paz)	America/La_Paz

(GMT -0400) Eastern Standard Time (EDT America/Thunder_Bay)	America/Thunder_Bay
(GMT -0400) Eastern Standard Time (EDT America/Indiana/Marengo)	America/Indiana/Marengo
(GMT -0400) Atlantic Standard Time (AST America/Blanc-Sablon)	America/Blanc-Sablon
(GMT -0400) Atlantic Standard Time (AST America/Santo_Domingo)	America/Santo_Domingo
(GMT -0400) Eastern Standard Time (EDT US/Eastern)	US/Eastern
(GMT -0400) Eastern Standard Time (EDT Canada/Eastern)	Canada/Eastern
(GMT -0400) Eastern Standard Time (EDT America/Port-au-Prince)	America/Port-au-Prince
(GMT -0400) Atlantic Standard Time (AST America/St_Barthelemy)	America/St_Barthelemy
(GMT -0400) Eastern Standard Time (EDT America/Nipigon)	America/Nipigon
(GMT -0400) Eastern Standard Time (EDT US/East-Indiana)	US/East-Indiana
(GMT -0400) Atlantic Standard Time (AST America/St_Lucia)	America/St_Lucia
(GMT -0400) Atlantic Standard Time (AST America/Montserrat)	America/Montserrat
(GMT -0400) Atlantic Standard Time (AST America/Lower_Princes)	America/Lower_Princes
(GMT -0400) Eastern Standard Time (EDT America/Detroit)	America/Detroit
(GMT -0400) Atlantic Standard Time (AST America/Tortola)	America/Tortola
(GMT -0400) Amazon Time (AMT America/Porto_Velho)	America/Porto_Velho
(GMT -0400) Amazon Time (AMT America/Campo_Grande)	America/Campo_Grande
(GMT -0400) Atlantic Standard Time (AST America/Virgin)	America/Virgin
(GMT -0400) Eastern Standard Time (EDT America/Pangnirtung)	America/Pangnirtung

(GMT -0400) Eastern Standard Time (EDT America/Montreal)	America/Montreal
(GMT -0400) Eastern Standard Time (EDT America/Indiana/Winamac)	America/Indiana/Winamac
(GMT -0400) Amazon Time (AMT America/Boa_Vista)	America/Boa_Vista
(GMT -0400) Atlantic Standard Time (AST America/Grenada)	America/Grenada
(GMT -0400) Eastern Standard Time (EDT America/New_York)	America/New_York
(GMT -0400) Atlantic Standard Time (AST America/St_Kitts)	America/St_Kitts
(GMT -0400) Venezuela Time (VET America/Caracas)	America/Caracas
(GMT -0400) Atlantic Standard Time (AST America/Guadeloupe)	America/Guadeloupe
(GMT -0400) Eastern Standard Time (EDT America/Toronto)	America/Toronto
(GMT -0300) Chile Time (CLST Chile/Continental)	Chile/Continental
(GMT -0300) Argentine Time (ART America/Argentina/Catamarca)	America/Argentina/Catamarca
(GMT -0300) Atlantic Standard Time (ADT Canada/Atlantic)	Canada/Atlantic
(GMT -0300) Argentine Time (ART America/Argentina/Cordoba)	America/Argentina/Cordoba
(GMT -0300) Brasilia Time (BRT America/Araguaina)	America/Araguaina
(GMT -0300) Argentine Time (ART America/Argentina/Salta)	America/Argentina/Salta
(GMT -0300) GMT-0300 (GMT-0300 Etc/GMT+3)	Etc/GMT+3
(GMT -0300) Uruguay Time (UYT America/Monteveo)	America/Monteveo
(GMT -0300) Brasilia Time (BRT Brazil/East)	Brazil/East
(GMT -0300) Argentine Time (ART America/Argentina/Mendoza)	America/Argentina/Mendoza

(GMT -0300) Argentine Time (ART America/Argentina/Rio_Gallegos)	America/Argentina/Rio_Gallegos
(GMT -0300) Argentine Time (ART America/Catamarca)	America/Catamarca
(GMT -0300) Western Greenland Time (WGT America/Godthab)	America/Godthab
(GMT -0300) Argentine Time (ART America/Cordoba)	America/Cordoba
(GMT -0300) Brasilia Time (BRT America/Sao_Paulo)	America/Sao_Paulo
(GMT -0300) Argentine Time (ART America/Argentina/Jujuy)	America/Argentina/Jujuy
(GMT -0300) French Guiana Time (GFT America/Cayenne)	America/Cayenne
(GMT -0300) Brasilia Time (BRT America/Recife)	America/Recife
(GMT -0300) Argentine Time (ART America/Buenos_Aires)	America/Buenos_Aires
(GMT -0300) Suri Time (SRT America/Paramaribo)	America/Paramaribo
(GMT -0300) Atlantic Standard Time (ADT America/Moncton)	America/Moncton
(GMT -0300) Argentine Time (ART America/Mendoza)	America/Mendoza
(GMT -0300) Brasilia Time (BRT America/Santarem)	America/Santarem
(GMT -0300) Paraguay Time (PYST America/Asuncion)	America/Asuncion
(GMT -0300) Atlantic Standard Time (ADT Atlantic/Bermuda)	Atlantic/Bermuda
(GMT -0300) Brasilia Time (BRT America/Maceio)	America/Maceio
(GMT -0300) Falkland Is. Time (FKT Atlantic/Stanley)	Atlantic/Stanley
(GMT -0300) Atlantic Standard Time (ADT America/Halifax)	America/Halifax
(GMT -0300) Rothera Time (ROTT Antarctica/Rothera)	Antarctica/Rothera

(GMT -0300) Argentine Time (ART America/Argentina/San_Luis)	America/Argentina/San_Luis
(GMT -0300) Chile Time (CLST America/Santiago)	America/Santiago
(GMT -0300) Argentine Time (ART America/Argentina/Ushuaia)	America/Argentina/Ushuaia
(GMT -0300) Chile Time (CLT Antarctica/Palmer)	Antarctica/Palmer
(GMT -0300) Atlantic Standard Time (ADT America/Glace_Bay)	America/Glace_Bay
(GMT -0300) Brasilia Time (BRT America/Fortaleza)	America/Fortaleza
(GMT -0300) Atlantic Standard Time (ADT America/Thule)	America/Thule
(GMT -0300) Argentine Time (ART America/Argentina/La_Rioja)	America/Argentina/La_Rioja
(GMT -0300) Brasilia Time (BRT America/Belem)	America/Belem
(GMT -0300) Argentine Time (ART America/Jujuy)	America/Jujuy
(GMT -0300) Brasilia Time (BRT America/Bahia)	America/Bahia
(GMT -0300) Atlantic Standard Time (ADT America/Goose_Bay)	America/Goose_Bay
(GMT -0300) Argentine Time (ART America/Argentina/San_Juan)	America/Argentina/San_Juan
(GMT -0300) Argentine Time (ART America/Argentina/ComodRivadavia)	America/Argentina/ComodRivadavia
(GMT -0300) Argentine Time (ART America/Argentina/Tucuman)	America/Argentina/Tucuman
(GMT -0300) Argentine Time (ART America/Rosario)	America/Rosario
(GMT -0300) Argentine Time (ART America/Argentina/Buenos_Aires)	America/Argentina/Buenos_Aires
(GMT -0230) Newfoundland Standard Time (NDT America/St_Johns)	America/St_Johns
(GMT -0230) Newfoundland Standard Time (NDT Canada/Newfoundland)	Canada/Newfoundland

(GMT -0200) Pierre & Miquelon Standard Time (PMDT America/Miquelon)	America/Miquelon
(GMT -0200) GMT-0200 (GMT-0200 Etc/GMT+2)	Etc/GMT+2
(GMT -0200) Fernando de Noronha Time (FNT America/Noronha)	America/Noronha
(GMT -0200) Fernando de Noronha Time (FNT Brazil/DeNoronha)	Brazil/DeNoronha
(GMT -0200) South Georgia Standard Time (GST Atlantic/South_Georgia)	Atlantic/South_Georgia
(GMT -0100) GMT-0100 (GMT-0100 Etc/GMT+1)	Etc/GMT+1
(GMT -0100) Cape Verde Time (CVT Atlantic/Cape_Verde)	Atlantic/Cape_Verde
(GMT -0100) Azores Time (AZOT Atlantic/Azores)	Atlantic/Azores
(GMT -0100) Eastern Greenland Time (EGT America/Scoresbysund)	America/Scoresbysund
(GMT 0000) Greenwich Mean Time (GMT Europe/London)	Europe/London
(GMT 0000) Greenwich Mean Time (GMT GMT)	GMT
(GMT 0000) Greenwich Mean Time (GMT Etc/GMT-0)	Etc/GMT-0
(GMT 0000) Greenwich Mean Time (GMT Europe/Jersey)	Europe/Jersey
(GMT 0000) Greenwich Mean Time (GMT Atlantic/St_Helena)	Atlantic/St_Helena
(GMT 0000) Greenwich Mean Time (GMT Europe/Guernsey)	Europe/Guernsey
(GMT 0000) Greenwich Mean Time (GMT Europe/Isle_of_Man)	Europe/Isle_of_Man
(GMT 0000) Greenwich Mean Time (GMT Etc/GMT+0)	Etc/GMT+0
(GMT 0000) Greenwich Mean Time (GMT Africa/Banjul)	Africa/Banjul
(GMT 0000) Greenwich Mean Time (GMT Etc/GMT)	Etc/GMT

(GMT 0000) Greenwich Mean Time (GMT Africa/Freetown)	Africa/Freetown
(GMT 0000) Greenwich Mean Time (GMT GB-Eire)	GB-Eire
(GMT 0000) Greenwich Mean Time (GMT Africa/Bamako)	Africa/Bamako
(GMT 0000) Greenwich Mean Time (GMT GB)	GB
(GMT 0000) Greenwich Mean Time (GMT Africa/Conakry)	Africa/Conakry
(GMT 0000) Western European Time (WET Portugal)	Portugal
(GMT 0000) Coordinated Universal Time (UTC Universal)	Universal
(GMT 0000) Greenwich Mean Time (GMT Africa/Nouakchott)	Africa/Nouakchott
(GMT 0000) Coordinated Universal Time (UTC Antarctica/Troll)	Antarctica/Troll
(GMT 0000) Coordinated Universal Time (UTC UTC)	UTC
(GMT 0000) Coordinated Universal Time (UTC Etc/Universal)	Etc/Universal
(GMT 0000) Western European Time (WET Atlantic/Faeroe)	Atlantic/Faeroe
(GMT 0000) Greenwich Mean Time (GMT Africa/Abjan)	Africa/Abjan
(GMT 0000) Greenwich Mean Time (GMT Eire)	Eire
(GMT 0000) Ghana Mean Time (GMT Africa/Accra)	Africa/Accra
(GMT 0000) Western European Time (WET Atlantic/Faroe)	Atlantic/Faroe
(GMT 0000) Coordinated Universal Time (UTC Etc/UCT)	Etc/UCT
(GMT 0000) Greenwich Mean Time (GMT GMT0)	GMT0
(GMT 0000) Greenwich Mean Time (GMT Europe/Dublin)	Europe/Dublin

(GMT 0000) Coordinated Universal Time (UTC Zulu)	Zulu
(GMT 0000) Greenwich Mean Time (GMT Africa/Ouagadougou)	Africa/Ouagadougou
(GMT 0000) Greenwich Mean Time (GMT Atlantic/Reykjavik)	Atlantic/Reykjavik
(GMT 0000) Western European Time (WET Atlantic/Madeira)	Atlantic/Madeira
(GMT 0000) Coordinated Universal Time (UTC Etc/Zulu)	Etc/Zulu
(GMT 0000) Greenwich Mean Time (GMT Iceland)	Iceland
(GMT 0000) Western European Time (WET Europe/Lisbon)	Europe/Lisbon
(GMT 0000) Western European Time (WET Atlantic/Canary)	Atlantic/Canary
(GMT 0000) Greenwich Mean Time (GMT Africa/Lome)	Africa/Lome
(GMT 0000) Greenwich Mean Time (GMT Greenwich)	Greenwich
(GMT 0000) Greenwich Mean Time (GMT Europe/Belfast)	Europe/Belfast
(GMT 0000) Greenwich Mean Time (GMT Etc/GMT0)	Etc/GMT0
(GMT 0000) Greenwich Mean Time (GMT America/Danmarkshavn)	America/Danmarkshavn
(GMT 0000) Greenwich Mean Time (GMT Africa/Dakar)	Africa/Dakar
(GMT 0000) Greenwich Mean Time (GMT Africa/Bissau)	Africa/Bissau
(GMT 0000) Western European Time (WET WET)	WET
(GMT 0000) Greenwich Mean Time (GMT Etc/Greenwich)	Etc/Greenwich
(GMT 0000) Greenwich Mean Time (GMT Africa/Timbuktu)	Africa/Timbuktu
(GMT 0000) Coordinated Universal Time (UTC UCT)	UCT

(GMT 0000) Greenwich Mean Time (GMT Africa/Monrovia)	Africa/Monrovia
(GMT 0000) Coordinated Universal Time (UTC Etc/UTC)	Etc/UTC
(GMT 0100) Central European Time (CET Europe/Brussels)	Europe/Brussels
(GMT 0100) Central European Time (CET Europe/Warsaw)	Europe/Warsaw
(GMT 0100) Central European Time (CET CET)	CET
(GMT 0100) GMT+0100 (GMT+0100 Etc/GMT-1)	Etc/GMT-1
(GMT 0100) Central European Time (CET Europe/Luxembourg)	Europe/Luxembourg
(GMT 0100) Central European Time (CET Africa/Tunis)	Africa/Tunis
(GMT 0100) Central European Time (CET Europe/Malta)	Europe/Malta
(GMT 0100) Central European Time (CET Europe/Busingen)	Europe/Busingen
(GMT 0100) Western African Time (WAT Africa/Malabo)	Africa/Malabo
(GMT 0100) Central European Time (CET Europe/Skopje)	Europe/Skopje
(GMT 0100) Central European Time (CET Europe/Sarajevo)	Europe/Sarajevo
(GMT 0100) Western African Time (WAT Africa/Lagos)	Africa/Lagos
(GMT 0100) Central European Time (CET Europe/Rome)	Europe/Rome
(GMT 0100) Central European Time (CET Africa/Algiers)	Africa/Algiers
(GMT 0100) Central European Time (CET Europe/Zurich)	Europe/Zurich
(GMT 0100) Central European Time (CET Europe/Gibraltar)	Europe/Gibraltar
(GMT 0100) Central European Time (CET Europe/Vaduz)	Europe/Vaduz

(GMT 0100) Central European Time (CET Europe/Ljubljana)	Europe/Ljubljana
(GMT 0100) Central European Time (CET Europe/Berlin)	Europe/Berlin
(GMT 0100) Central European Time (CET Europe/Stockholm)	Europe/Stockholm
(GMT 0100) Central European Time (CET Europe/Budapest)	Europe/Budapest
(GMT 0100) Central European Time (CET Europe/Zagreb)	Europe/Zagreb
(GMT 0100) Western African Time (WAT Africa/Sao_Tome)	Africa/Sao_Tome
(GMT 0100) Central European Time (CET Europe/Paris)	Europe/Paris
(GMT 0100) Western African Time (WAT Africa/Ndjamena)	Africa/Ndjamena
(GMT 0100) Central European Time (CET Africa/Ceuta)	Africa/Ceuta
(GMT 0100) Central European Time (CET Europe/Prague)	Europe/Prague
(GMT 0100) Central European Time (CET Europe/Copenhagen)	Europe/Copenhagen
(GMT 0100) Central European Time (CET Europe/Vienna)	Europe/Vienna
(GMT 0100) Central European Time (CET Europe/Tirane)	Europe/Tirane
(GMT 0100) Middle Europe Time (MET MET)	MET
(GMT 0100) Central European Time (CET Europe/Amsterdam)	Europe/Amsterdam
(GMT 0100) Western African Time (WAT Africa/Libreville)	Africa/Libreville
(GMT 0100) Western European Time (WET Africa/El_Aaiun)	Africa/El_Aaiun
(GMT 0100) Central European Time (CET Europe/San_Marino)	Europe/San_Marino
(GMT 0100) Western African Time (WAT Africa/Douala)	Africa/Douala

(GMT 0100) Western African Time (WAT Africa/Brazzaville)	Africa/Brazzaville
(GMT 0100) Western African Time (WAT Africa/Porto-Novo)	Africa/Porto-Novo
(GMT 0100) Central European Time (CET Poland)	Poland
(GMT 0100) Central European Time (CET Europe/Andorra)	Europe/Andorra
(GMT 0100) Central European Time (CET Europe/Oslo)	Europe/Oslo
(GMT 0100) Central European Time (CET Europe/Podgorica)	Europe/Podgorica
(GMT 0100) Western European Time (WET Africa/Casablanca)	Africa/Casablanca
(GMT 0100) Western African Time (WAT Africa/Luanda)	Africa/Luanda
(GMT 0100) Central European Time (CET Atlantic/Jan_Mayen)	Atlantic/Jan_Mayen
(GMT 0100) Western African Time (WAT Africa/Kinshasa)	Africa/Kinshasa
(GMT 0100) Central European Time (CET Europe/Madr)	Europe/Madr
(GMT 0100) Western African Time (WAT Africa/Bangui)	Africa/Bangui
(GMT 0100) Central European Time (CET Europe/Belgrade)	Europe/Belgrade
(GMT 0100) Western African Time (WAT Africa/Niamey)	Africa/Niamey
(GMT 0100) Central European Time (CET Europe/Bratislava)	Europe/Bratislava
(GMT 0100) Central European Time (CET Arctic/Longyearbyen)	Arctic/Longyearbyen
(GMT 0100) Central European Time (CET Europe/Vatican)	Europe/Vatican
(GMT 0100) Central European Time (CET Europe/Monaco)	Europe/Monaco
(GMT 0200) Eastern European Time (EET Africa/Cairo)	Africa/Cairo

(GMT 0200) South Africa Standard Time (SAST Africa/Mbabane)	Africa/Mbabane
(GMT 0200) GMT+0200 (GMT+0200 Etc/GMT-2)	Etc/GMT-2
(GMT 0200) Eastern European Time (EET Europe/Zaporozhye)	Europe/Zaporozhye
(GMT 0200) Eastern European Time (EET Libya)	Libya
(GMT 0200) Central African Time (CAT Africa/Kigali)	Africa/Kigali
(GMT 0200) Eastern European Time (EET Africa/Tripoli)	Africa/Tripoli
(GMT 0200) Israel Standard Time (IST Israel)	Israel
(GMT 0200) Eastern European Time (EET Europe/Kaliningrad)	Europe/Kaliningrad
(GMT 0200) Central African Time (CAT Africa/Windhoek)	Africa/Windhoek
(GMT 0200) Eastern European Time (EET Europe/Bucharest)	Europe/Bucharest
(GMT 0200) Eastern European Time (EET Europe/Mariehamn)	Europe/Mariehamn
(GMT 0200) Central African Time (CAT Africa/Lubumbashi)	Africa/Lubumbashi
(GMT 0200) Eastern European Time (EET Europe/Tiraspol)	Europe/Tiraspol
(GMT 0200) Eastern European Time (EET Europe/Chisinau)	Europe/Chisinau
(GMT 0200) Eastern European Time (EET Europe/Helsinki)	Europe/Helsinki
(GMT 0200) Eastern European Time (EET Asia/Beirut)	Asia/Beirut
(GMT 0200) Israel Standard Time (IST Asia/Tel_Aviv)	Asia/Tel_Aviv
(GMT 0200) Eastern European Time (EET Europe/Sofia)	Europe/Sofia
(GMT 0200) Central African Time (CAT Africa/Gaborone)	Africa/Gaborone

(GMT 0200) Eastern European Time (EET Asia/Gaza)	Asia/Gaza
(GMT 0200) Eastern European Time (EET Europe/Riga)	Europe/Riga
(GMT 0200) Central African Time (CAT Africa/Maputo)	Africa/Maputo
(GMT 0200) Eastern European Time (EET Asia/Damascus)	Asia/Damascus
(GMT 0200) Eastern European Time (EET Europe/Uzhgorod)	Europe/Uzhgorod
(GMT 0200) Israel Standard Time (IST Asia/Jerusalem)	Asia/Jerusalem
(GMT 0200) Central African Time (CAT Africa/Bujumbura)	Africa/Bujumbura
(GMT 0200) Eastern European Time (EET Europe/Kiev)	Europe/Kiev
(GMT 0200) Eastern European Time (EET Europe/Vilnius)	Europe/Vilnius
(GMT 0200) South Africa Standard Time (SAST Africa/Maseru)	Africa/Maseru
(GMT 0200) Central African Time (CAT Africa/Blantyre)	Africa/Blantyre
(GMT 0200) Central African Time (CAT Africa/Lusaka)	Africa/Lusaka
(GMT 0200) Central African Time (CAT Africa/Harare)	Africa/Harare
(GMT 0200) Eastern European Time (EET Europe/Tallinn)	Europe/Tallinn
(GMT 0200) Central African Time (CAT Africa/Khartoum)	Africa/Khartoum
(GMT 0200) South Africa Standard Time (SAST Africa/Johannesburg)	Africa/Johannesburg
(GMT 0200) Eastern European Time (EET Asia/Nicosia)	Asia/Nicosia
(GMT 0200) GMT+0200 (GMT+0200 Asia/Famagusta)	Asia/Famagusta
(GMT 0200) Eastern European Time (EET EET)	EET

(GMT 0200) Eastern European Time (EET Asia/Hebron)	Asia/Hebron
(GMT 0200) Eastern European Time (EET Egypt)	Egypt
(GMT 0200) Eastern European Time (EET Asia/Amman)	Asia/Amman
(GMT 0200) Eastern European Time (EET Europe/Nicosia)	Europe/Nicosia
(GMT 0200) Eastern European Time (EET Europe/Athens)	Europe/Athens
(GMT 0300) Arabia Standard Time (AST Asia/Aden)	Asia/Aden
(GMT 0300) Eastern African Time (EAT Africa/Nairobi)	Africa/Nairobi
(GMT 0300) Eastern European Time (EET Europe/Istanbul)	Europe/Istanbul
(GMT 0300) GMT+0300 (GMT+0300 Etc/GMT-3)	Etc/GMT-3
(GMT 0300) Eastern African Time (EAT Indian/Comoro)	Indian/Comoro
(GMT 0300) Syowa Time (SYOT Antarctica/Syowa)	Antarctica/Syowa
(GMT 0300) Eastern African Time (EAT Africa/Mogadishu)	Africa/Mogadishu
(GMT 0300) Eastern African Time (EAT Africa/Asmera)	Africa/Asmera
(GMT 0300) Eastern European Time (EET Asia/Istanbul)	Asia/Istanbul
(GMT 0300) Moscow Standard Time (MSK Europe/Moscow)	Europe/Moscow
(GMT 0300) Eastern African Time (EAT Africa/Djibouti)	Africa/Djibouti
(GMT 0300) Moscow Standard Time (MSK Europe/Simferopol)	Europe/Simferopol
(GMT 0300) Eastern African Time (EAT Africa/Asmara)	Africa/Asmara
(GMT 0300) Arabia Standard Time (AST Asia/Baghdad)	Asia/Baghdad

(GMT 0300) Eastern African Time (EAT Africa/Dar_es_Salaam)	Africa/Dar_es_Salaam
(GMT 0300) Eastern African Time (EAT Africa/Addis_Ababa)	Africa/Addis_Ababa
(GMT 0300) Arabia Standard Time (AST Asia/Riyadh)	Asia/Riyadh
(GMT 0300) Arabia Standard Time (AST Asia/Kuwait)	Asia/Kuwait
(GMT 0300) GMT+0300 (GMT+0300 Europe/Kirov)	Europe/Kirov
(GMT 0300) Eastern African Time (EAT Africa/Kampala)	Africa/Kampala
(GMT 0300) Moscow Standard Time (MSK Europe/Minsk)	Europe/Minsk
(GMT 0300) Arabia Standard Time (AST Asia/Qatar)	Asia/Qatar
(GMT 0300) Arabia Standard Time (AST Asia/Bahrain)	Asia/Bahrain
(GMT 0300) Eastern African Time (EAT Indian/Antananarivo)	Indian/Antananarivo
(GMT 0300) Eastern African Time (EAT Indian/Mayotte)	Indian/Mayotte
(GMT 0300) Eastern European Time (EET Turkey)	Turkey
(GMT 0300) Eastern African Time (EAT Africa/Juba)	Africa/Juba
(GMT 0300) Moscow Standard Time (MSK W-SU)	W-SU
(GMT 0330) Iran Standard Time (IRST Iran)	Iran
(GMT 0330) Iran Standard Time (IRST Asia/Tehran)	Asia/Tehran
(GMT 0400) Armenia Time (AMT Asia/Yerevan)	Asia/Yerevan
(GMT 0400) GMT+0400 (GMT+0400 Etc/GMT-4)	Etc/GMT-4
(GMT 0400) Gulf Standard Time (GST Asia/Dubai)	Asia/Dubai

(GMT 0400) Reunion Time (RET Indian/Reunion)	Indian/Reunion
(GMT 0400) Mauritius Time (MUT Indian/Mauritius)	Indian/Mauritius
(GMT 0400) Samara Time (SAMT Europe/Samara)	Europe/Samara
(GMT 0400) Seychelles Time (SCT Indian/Mahe)	Indian/Mahe
(GMT 0400) Azerbaijan Time (AZT Asia/Baku)	Asia/Baku
(GMT 0400) Gulf Standard Time (GST Asia/Muscat)	Asia/Muscat
(GMT 0400) Moscow Standard Time (MSK Europe/Volgograd)	Europe/Volgograd
(GMT 0400) GMT+0400 (GMT+0400 Europe/Astrakhan)	Europe/Astrakhan
(GMT 0400) Georgia Time (GET Asia/Tbilisi)	Asia/Tbilisi
(GMT 0400) GMT+0400 (GMT+0400 Europe/Ulyanovsk)	Europe/Ulyanovsk
(GMT 0430) Afghanistan Time (AFT Asia/Kabul)	Asia/Kabul
(GMT 0500) Aqtau Time (AQTT Asia/Aqtau)	Asia/Aqtau
(GMT 0500) GMT+0500 (GMT+0500 Etc/GMT-5)	Etc/GMT-5
(GMT 0500) Uzbekistan Time (UZT Asia/Samarkand)	Asia/Samarkand
(GMT 0500) Pakistan Time (PKT Asia/Karachi)	Asia/Karachi
(GMT 0500) Yekaterinburg Time (YEKT Asia/Yekaterinburg)	Asia/Yekaterinburg
(GMT 0500) Tajikistan Time (TJT Asia/Dushanbe)	Asia/Dushanbe
(GMT 0500) Maldives Time (MVT Indian/Maldives)	Indian/Maldives
(GMT 0500) Oral Time (ORAT Asia/Oral)	Asia/Oral

(GMT 0500) Uzbekistan Time (UZT Asia/Tashkent)	Asia/Tashkent
(GMT 0500) Mawson Time (MAWT Antarctica/Mawson)	Antarctica/Mawson
(GMT 0500) Aqtobe Time (AQTT Asia/Aqtobe)	Asia/Aqtobe
(GMT 0500) Turkmenistan Time (TMT Asia/Ashkhabad)	Asia/Ashkhabad
(GMT 0500) Turkmenistan Time (TMT Asia/Ashgabat)	Asia/Ashgabat
(GMT 0500) French Southern & Antarctic Lands Time (TFT Indian/Kerguelen)	Indian/Kerguelen
(GMT 0530) India Standard Time (IST Asia/Kolkata)	Asia/Kolkata
(GMT 0530) India Standard Time (IST Asia/Colombo)	Asia/Colombo
(GMT 0530) India Standard Time (IST Asia/Calcutta)	Asia/Calcutta
(GMT 0545) Nepal Time (NPT Asia/Kathmandu)	Asia/Kathmandu
(GMT 0545) Nepal Time (NPT Asia/Katmandu)	Asia/Katmandu
(GMT 0600) Xinjiang Standard Time (XJT Asia/Kashgar)	Asia/Kashgar
(GMT 0600) GMT+0600 (GMT+0600 Etc/GMT-6)	Etc/GMT-6
(GMT 0600) Alma-Ata Time (ALMT Asia/Almaty)	Asia/Almaty
(GMT 0600) Bangladesh Time (BDT Asia/Dacca)	Asia/Dacca
(GMT 0600) Omsk Time (OMST Asia/Omsk)	Asia/Omsk
(GMT 0600) Bangladesh Time (BDT Asia/Dhaka)	Asia/Dhaka
(GMT 0600) Indian Ocean Territory Time (IOT Indian/Chagos)	Indian/Chagos
(GMT 0600) Qyzylorda Time (QYZT Asia/Qyzylorda)	Asia/Qyzylorda

(GMT 0600) Kirgizstan Time (KGT Asia/Bishkek)	Asia/Bishkek
(GMT 0600) Vostok Time (VOST Antarctica/Vostok)	Antarctica/Vostok
(GMT 0600) Xinjiang Standard Time (XJT Asia/Urumqi)	Asia/Urumqi
(GMT 0600) Bhutan Time (BTT Asia/Thimbu)	Asia/Thimbu
(GMT 0600) Bhutan Time (BTT Asia/Thimphu)	Asia/Thimphu
(GMT 0630) Myanmar Time (MMT Asia/Yangon)	Asia/Yangon
(GMT 0630) Myanmar Time (MMT Asia/Rangoon)	Asia/Rangoon
(GMT 0630) Cocos Islands Time (CCT Indian/Cocos)	Indian/Cocos
(GMT 0700) West Indonesia Time (WIB Asia/Pontianak)	Asia/Pontianak
(GMT 0700) GMT+0700 (GMT+0700 Etc/GMT-7)	Etc/GMT-7
(GMT 0700) Indochina Time (ICT Asia/Phnom_Penh)	Asia/Phnom_Penh
(GMT 0700) Novosibirsk Time (NOVT Asia/Novosibirsk)	Asia/Novosibirsk
(GMT 0700) Davis Time (DAVT Antarctica/Davis)	Antarctica/Davis
(GMT 0700) GMT+0700 (GMT+0700 Asia/Tomsk)	Asia/Tomsk
(GMT 0700) West Indonesia Time (WIB Asia/Jakarta)	Asia/Jakarta
(GMT 0700) GMT+0700 (GMT+0700 Asia/Barnaul)	Asia/Barnaul
(GMT 0700) Christmas Island Time (CXT Indian/Christmas)	Indian/Christmas
(GMT 0700) Indochina Time (ICT Asia/Ho_Chi_Minh)	Asia/Ho_Chi_Minh
(GMT 0700) Hovd Time (HOVT Asia/Hovd)	Asia/Hovd

(GMT 0700) Indochina Time (ICT Asia/Bangkok)	Asia/Bangkok
(GMT 0700) Indochina Time (ICT Asia/Vientiane)	Asia/Vientiane
(GMT 0700) Krasnoyarsk Time (KRAT Asia/Novokuznetsk)	Asia/Novokuznetsk
(GMT 0700) Krasnoyarsk Time (KRAT Asia/Krasnoyarsk)	Asia/Krasnoyarsk
(GMT 0700) Indochina Time (ICT Asia/Saigon)	Asia/Saigon
(GMT 0800) Malaysia Time (MYT Asia/Kuching)	Asia/Kuching
(GMT 0800) China Standard Time (CST Asia/Chungking)	Asia/Chungking
(GMT 0800) GMT+0800 (GMT+0800 Etc/GMT-8)	Etc/GMT-8
(GMT 0800) Australian Western Standard Time (AWST Australia/Perth)	Australia/Perth
(GMT 0800) China Standard Time (CST Asia/Macao)	Asia/Macao
(GMT 0800) China Standard Time (CST Asia/Macau)	Asia/Macau
(GMT 0800) Choibalsan Time (CHOT Asia/Choibalsan)	Asia/Choibalsan
(GMT 0800) China Standard Time (CST Asia/Shanghai)	Asia/Shanghai
(GMT 0800) Australian Western Standard Time (AWST Antarctica/Casey)	Antarctica/Casey
(GMT 0800) Ulaanbaatar Time (ULAT Asia/Ulan_Bator)	Asia/Ulan_Bator
(GMT 0800) China Standard Time (CST Asia/Chongqing)	Asia/Chongqing
(GMT 0800) Ulaanbaatar Time (ULAT Asia/Ulaanbaatar)	Asia/Ulaanbaatar
(GMT 0800) China Standard Time (CST Asia/Taipei)	Asia/Taipei
(GMT 0800) Philippines Standard Time (PST Asia/Manila)	Asia/Manila

(GMT 0800) China Standard Time (CST PRC)	PRC
(GMT 0800) Central Indonesia Time (WITA Asia/Ujung_Pandang)	Asia/Ujung_Pandang
(GMT 0800) China Standard Time (CST Asia/Harbin)	Asia/Harbin
(GMT 0800) Singapore Time (SGT Singapore)	Singapore
(GMT 0800) Brunei Time (BNT Asia/Brunei)	Asia/Brunei
(GMT 0800) Australian Western Standard Time (AWST Australia/West)	Australia/West
(GMT 0800) Hong Kong Time (HKT Asia/Hong_Kong)	Asia/Hong_Kong
(GMT 0800) Central Indonesia Time (WITA Asia/Makassar)	Asia/Makassar
(GMT 0800) Hong Kong Time (HKT Hongkong)	Hongkong
(GMT 0800) Malaysia Time (MYT Asia/Kuala_Lumpur)	Asia/Kuala_Lumpur
(GMT 0800) Irkutsk Time (IRKT Asia/Irkutsk)	Asia/Irkutsk
(GMT 0800) Singapore Time (SGT Asia/Singapore)	Asia/Singapore
(GMT 0845) Australian Central Western Standard Time (ACWST Australia/Eucla)	Australia/Eucla
(GMT 0900) GMT+0900 (GMT+0900 Etc/GMT-9)	Etc/GMT-9
(GMT 0900) Palau Time (PWT Pacific/Palau)	Pacific/Palau
(GMT 0900) Yakutsk Time (YAKT Asia/Chita)	Asia/Chita
(GMT 0900) Timor-Leste Time (TLT Asia/Dili)	Asia/Dili
(GMT 0900) East Indonesia Time (WIT Asia/Jayapura)	Asia/Jayapura
(GMT 0900) Yakutsk Time (YAKT Asia/Yakutsk)	Asia/Yakutsk

(GMT 0900) Korea Standard Time (KST Asia/Pyongyang)	Asia/Pyongyang
(GMT 0900) Korea Standard Time (KST ROK)	ROK
(GMT 0900) Korea Standard Time (KST Asia/Seoul)	Asia/Seoul
(GMT 0900) Yakutsk Time (YAKT Asia/Khandyga)	Asia/Khandyga
(GMT 0900) Japan Standard Time (JST Japan)	Japan
(GMT 0900) Japan Standard Time (JST Asia/Tokyo)	Asia/Tokyo
(GMT 0930) Australian Central Standard Time (Northern Territory) (ACST Australia/North)	Australia/North
(GMT 0930) Australian Central Standard Time (Northern Territory) (ACST Australia/Darwin)	Australia/Darwin
(GMT 1000) Chuuk Time (CHUT Pacific/Yap)	Pacific/Yap
(GMT 1000) Papua New Guinea Time (PGT Pacific/Port_Moresby)	Pacific/Port_Moresby
(GMT 1000) Chuuk Time (CHUT Pacific/Chuuk)	Pacific/Chuuk
(GMT 1000) Australian Eastern Standard Time (Queensland) (AEST Australia/Queensland)	Australia/Queensland
(GMT 1000) Chamorro Standard Time (ChST Pacific/Guam)	Pacific/Guam
(GMT 1000) Chuuk Time (CHUT Pacific/Truk)	Pacific/Truk
(GMT 1000) Vladivostok Time (VLAT Asia/Vladivostok)	Asia/Vladivostok
(GMT 1000) Chamorro Standard Time (ChST Pacific/Saipan)	Pacific/Saipan
(GMT 1000) Dumont-d'Urville Time (DDUT Antarctica/DumontDUrville)	Antarctica/DumontDUrville
(GMT 1000) Australian Eastern Standard Time (Queensland) (AEST	Australia/Brisbane

Australia/Brisbane)

(GMT 1000) GMT+1000 (GMT+1000 Etc/GMT-10)	Etc/GMT-10
(GMT 1000) Ust-Nera Time (VLAT Asia/Ust-Nera)	Asia/Ust-Nera
(GMT 1000) Australian Eastern Standard Time (Queensland) (AEST Australia/Lindeman)	Australia/Lindeman
(GMT 1030) Australian Central Standard Time (South Australia/New South Wales) (ACDT Australia/Yancowinna)	Australia/Yancowinna
(GMT 1030) Australian Central Standard Time (South Australia) (ACDT Australia/Adelae)	Australia/Adelae
(GMT 1030) Australian Central Standard Time (South Australia/New South Wales) (ACDT Australia/Broken_Hill)	Australia/Broken_Hill
(GMT 1030) Australian Central Standard Time (South Australia) (ACDT Australia/South)	Australia/South
(GMT 1100) Australian Eastern Standard Time (Tasmania) (AEDT Australia/Hobart)	Australia/Hobart
(GMT 1100) Australian Eastern Standard Time (Tasmania) (AEDT Australia/Tasmania)	Australia/Tasmania
(GMT 1100) Australian Eastern Standard Time (New South Wales) (AEDT Australia/ACT)	Australia/ACT
(GMT 1100) Pohnpei Time (PONT Pacific/Ponape)	Pacific/Ponape
(GMT 1100) Bougainville Standard Time (BST Pacific/Bougainville)	Pacific/Bougainville
(GMT 1100) Australian Eastern Standard Time (Victoria) (AEDT Australia/Victoria)	Australia/Victoria
(GMT 1100) Macquarie Island Standard	Antarctica/Macquarie

Time (MIST Antarctica/Macquarie)	
(GMT 1100) Australian Eastern Standard Time (New South Wales) (AEDT Australia/Canberra)	Australia/Canberra
(GMT 1100) Australian Eastern Standard Time (New South Wales) (AEDT Australia/Currie)	Australia/Currie
(GMT 1100) Lord Howe Standard Time (LHDT Australia/Lord_Howe)	Australia/Lord_Howe
(GMT 1100) Australian Eastern Standard Time (New South Wales) (AEDT Australia/NSW)	Australia/NSW
(GMT 1100) Pohnpei Time (PONT Pacific/Pohnpei)	Pacific/Pohnpei
(GMT 1100) Vanuatu Time (VUT Pacific/Efate)	Pacific/Efate
(GMT 1100) Norfolk Time (NFT Pacific/Norfolk)	Pacific/Norfolk
(GMT 1100) Magadan Time (MAGT Asia/Magadan)	Asia/Magadan
(GMT 1100) Kosrae Time (KOST Pacific/Kosrae)	Pacific/Kosrae
(GMT 1100) Australian Eastern Standard Time (New South Wales) (AEDT Australia/Sydney)	Australia/Sydney
(GMT 1100) Lord Howe Standard Time (LHDT Australia/LHI)	Australia/LHI
(GMT 1100) Sakhalin Time (SAKT Asia/Sakhalin)	Asia/Sakhalin
(GMT 1100) New Caledonia Time (NCT Pacific/Noumea)	Pacific/Noumea
Etc/GMT-11	
(GMT 1100) GMT+1100 (GMT+1100 Etc/GMT-11)	Etc/GMT-11
(GMT 1100) Srednekolymensk Time (SRET Asia/Srednekolymensk)	Asia/Srednekolymensk
(GMT 1100) Australian Eastern Standard Time (Victoria) (AEDT Australia/Melbourne)	Australia/Melbourne

(GMT 1100) Solomon Is. Time (SBT Pacific/Guadalcanal)	Pacific/Guadalcanal
(GMT 1200) Marshall Islands Time (MHT Pacific/Kwajalein)	Pacific/Kwajalein
(GMT 1200) Wallis & Futuna Time (WFT Pacific/Wallis)	Pacific/Wallis
(GMT 1200) Fiji Time (FJT Pacific/Fiji)	Pacific/Fiji
(GMT 1200) Tuvalu Time (TVT Pacific/Funafuti)	Pacific/Funafuti
(GMT 1200) Nauru Time (NRT Pacific/Nauru)	Pacific/Nauru
(GMT 1200) Marshall Islands Time (MHT Kwajalein)	Kwajalein
(GMT 1200) Wake Time (WAKT Pacific/Wake)	Pacific/Wake
(GMT 1200) Gilbert Is. Time (GILT Pacific/Tarawa)	Pacific/Tarawa
(GMT 1200) Petropavlovsk-Kamchatski Time (PETT Asia/Kamchatka)	Asia/Kamchatka
(GMT 1200) GMT+1200 (GMT+1200 Etc/GMT-12)	Etc/GMT-12
(GMT 1200) Anadyr Time (ANAT Asia/Anadyr)	Asia/Anadyr
(GMT 1200) Marshall Islands Time (MHT Pacific/Majuro)	Pacific/Majuro
(GMT 1300) Tokelau Time (TKT Pacific/Fakaofu)	Pacific/Fakaofu
(GMT 1300) New Zealand Standard Time (NZDT Antarctica/McMurdo)	Antarctica/McMurdo
(GMT 1300) Phoenix Is. Time (PHOT Pacific/Enderbury)	Pacific/Enderbury
(GMT 1300) New Zealand Standard Time (NZDT NZ)	NZ
(GMT 1300) New Zealand Standard Time (NZDT Antarctica/South_Pole)	Antarctica/South_Pole
(GMT 1300) New Zealand Standard Time (NZDT Pacific/Auckland)	Pacific/Auckland
(GMT 1300) Tonga Time (TOT)	Pacific/Tongatapu

Pacific/Tongatapu)

(GMT 1300) GMT+1300 (GMT+1300
Etc/GMT-13)

Etc/GMT-13

(GMT 1345) Chatham Standard Time
(CHADT NZ-CHAT)

NZ-CHAT

(GMT 1345) Chatham Standard Time
(CHADT Pacific/Chatham)

Pacific/Chatham

(GMT 1400) West Samoa Standard
Time (WSDT Pacific/Apia)

Pacific/Apia

(GMT 1400) Line Is. Time (LINT
Pacific/Kiritimati)

Pacific/Kiritimati

(GMT 1400) GMT+1400 (GMT+1400
Etc/GMT-14)

Etc/GMT-14

Vulnerabilities Details

Get Vulnerabilities Details

/rest/pm/v1/vulnerabilities

[POST]

Use this API to fetch vulnerability details for vulnerabilities corresponding to the specified QIDs.

Input Parameters

Parameter	Description
qids (integer)	(Required) QIDs to include in the search list.

Sample - Get Vulnerability details for specified QIDs

API request

```
curl -X POST
"https://<QualysBaseURL>/pm/v1/vulnerabilities" -H "accept:
application/json" -H "Authorization: Bearer <<jwt token>>" -H
"Content-Type: application/json" -d "{\"qids\":[370341,91606,91851]}"
```

Request Body - Specify the QIDs to get related vulnerabilities

```
{
  "qids": [
    370341,91606,91851
  ]
}
```

Response

```
[
  {
    "id": 91851,
```

```
"title": "Microsoft Windows Security Update for January 2022",  
"cves": [  
  "CVE-2022-21910",  
  "CVE-2022-21877",  
  "CVE-2022-21833",  
  "CVE-2022-21876",  
  "CVE-2022-21912",  
  "CVE-2022-21879",  
  "CVE-2022-21835",  
  "CVE-2022-21878",  
  "CVE-2022-21834",  
  "CVE-2022-21873",  
  "CVE-2022-21872",  
  "CVE-2022-21875",  
  "CVE-2022-21874",  
  "CVE-2022-21918",  
  "CVE-2022-21919",  
  "CVE-2022-21958",  
  "CVE-2022-21914",  
  "CVE-2022-21913",  
  "CVE-2022-21836",  
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  "CVE-2022-21864",  
  "CVE-2022-21863",  
  "CVE-2022-21907",  
  "CVE-2022-21906",  
  "CVE-2022-21908",  
  "CVE-2022-21903",  
  "CVE-2022-21902",  
  "CVE-2022-21869",  
  "CVE-2022-21905",
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"CVE-2022-21904",
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"CVE-2022-21896",
"CVE-2022-21852",
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"CVE-2022-21858",
"CVE-2021-36976",
"CVE-2022-21860",
"CVE-2022-21888",
"CVE-2022-21921",
"CVE-2022-21887",
"CVE-2022-21964",
"CVE-2022-21920",
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"CVE-2022-21884",
"CVE-2022-21961",
"CVE-2022-21960",
"CVE-2022-21963",
"CVE-2022-21885",
"CVE-2022-21962",
"CVE-2021-22947",
"CVE-2022-21928",
"CVE-2022-21925",
"CVE-2022-21924",
"CVE-2022-21847",
"CVE-2022-21893",
"CVE-2022-21892"
],
"detectedDate": null,
"severity": 4,
"vulnType": "VULNERABILITY"
},
{
  "id": 370341,
  "title": "Mozilla Firefox Integer Overflow Vulnerability
(MFSA2017-08)",
  "cves": [
```



```
    "CVE-2017-5428"  
  ],  
  "detectedDate": null,  
  "severity": 5,  
  "vulnType": "VULNERABILITY"  
},  
{  
  "id": 91606,  
  "title": "Microsoft Malicious Software Removal Tool (MSRT)  
Privilege Escalation Vulnerability - February 2020",  
  "cves": [  
    "CVE-2020-0733"  
  ],  
  "detectedDate": null,  
  "severity": 4,  
  "vulnType": "VULNERABILITY"  
}  
]
```

Patch Reports

Get List of Generated Reports

`/rest/pm/v1/reports`

[GET]

Use this API to fetch a list of recently triggered reports.

Input Parameters

Parameter	Description
limit (string)	(Optional) Specify the number of reports to return. The default value is 5.

Sample - Get a list of recently triggered reports

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/reports?limit=5" -H "accept:
application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
[
  {
    "reportId": "7cfb30e0-7b99-4735-8935-172efee8aeaf",
    "type": "ASSET",
    "createdDate": 1642668577917,
    "expirationDate": 1643273377917,
    "status": 1,
    "queryHavingQuery": "(missingPatchCount>1) and
(patchStatus:[Missing] and isSuperseded:false) AND isRollback:true",
    "fileSize": "31.60 KB"
  },
  {
```

```

    "reportId": "20cc8ae1-2df7-47fa-9e31-28fdd6e2b3a8",
    "type": "PATCH",
    "createdDate": 1642496101954,
    "expirationDate": 1643100901954,
    "status": 1,
    "queryHavingQuery": "isRollback:true and (patchStatus: [Missing]
and isSuperseded: false) AND missingPatchCount>12",
    "fileSize": "27.58 KB"
  },
  {
    "reportId": "5fa7d2e5-e7be-47a8-8ffe-20c200c528e0",
    "type": "ASSET",
    "createdDate": 1642495876471,
    "expirationDate": 1643100676471,
    "status": 1,
    "queryHavingQuery": "(missingPatchCount>12) and
(patchStatus:[Missing] and isSuperseded:false) AND isRollback: true",
    "fileSize": "34.06 KB"
  },
  {
    "reportId": "165c3f2e-1882-4ced-baee-d3734bd5cc18",
    "type": "ASSET",
    "createdDate": 1642495766699,
    "expirationDate": 1643100566699,
    "status": 1,
    "queryHavingQuery": "(missingPatchCount>12) and
(patchStatus:[Missing] and isSuperseded:false) AND isRollback: true",
    "fileSize": "31.60 KB"
  },
  {
    "reportId": "44f91c53-a25a-4f1c-958e-01e052c902c3",
    "type": "JOB_PROGRESS",
    "createdDate": 1642488533253,
    "expirationDate": 1643093333253,
    "status": 1,
    "queryHavingQuery": "(jobId:6f490931-ae5c-432b-8157-e30b7d85fc52)
AND (asset.tags.id.name:Mock)",
    "fileSize": "1.33 KB"
  }
]

```

Get Assets Tab Report

`/rest/pm/v1/report/asset`

[GET]

Use this API to generate the asset tab report for the assets that match the filters requested in the input.

Input Parameters

Parameter	Description
havingQuery (string)	(Optional) Specify a QQL to filter assets based on patches search criteria. For example, category:"Security Patches"
query (string)	(Optional) Specify a QQL to filter assets based on search criteria For example, name:'Asset-windowsmachine1' Append the QQL (patchStatus:[Missing,Installed] and isSuperseded:false) to filter the latest missing and installed patches.
sort (string)	(Optional) Sort the asset values by certain data. For examples, [{"name":"asc"}]

Sample - Get the asset tab report with specified filters

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/report/asset?havingQuery=isSecurity%3A%
20true&platform=Windows&query
=tags.name%3A%20%60Cloud%20Agent%60%20and%20%28patchStatus%3A%20%5Bmis
sing%5D%20
```

```
and%20isSuperseded%3A%20false%29&sort=%5B%7B%22name%22%3A%22asc%22%7D%5D" -H "accept: application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
{  
  "reportId": "fdeff786-7c63-42fc-b64f-60560671df06"  
}
```

Get Deployment Job Progress Report

/rest/pm/v1/report/jobprogress/{deploymentJobId}

[GET]

Use this API to generate deployment job progress report for the specified job ID.

Input Parameters

Parameter	Description
deploymentJobId (string)	(Required) Deployment job ID for which you want to fetch details.
filter (string)	(Optional) Specify the QQL to filter job based on search criteria. For example, status:Completed
sort (string)	(Optional) Sort the jobs by certain data. For examples, [{"status": "asc"}]

Sample - Get the job progress report for a job ID

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/report/jobprogress/330b9957-9434-4042-9d67-9a3260b6de45?filter=tags.name%3A%20%60Cloud%20Agent%60&sort=%5B%7B%22status%22%3A%22asc%22%7D%5D" -H "accept: application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
{
  "reportId": "bd388f2b-d11e-4a5b-8596-2092025e6372"
```

}

Get Patches Tab Report

/rest/pm/v1/report/patch

[GET]

Use this API to get a **Patches** tab report for the patches that match the filters provided in the input.

Input Parameters

Parameter	Description
havingQuery (string)	(Optional) Specify a QQL to filter patches based on asset search criteria. For example, name: windowsasset1
query (string)	(Optional) Specify a QQL to filter patches based on search criteria. For example, isSecurity:true Append the QQL (patchStatus:[Missing,Installed] and isSuperseded:false) to filter the latest missing and installed patches.
sort (string)	(Optional) Sort the patch values by certain data. For examples, [{"vendorSeverity":"asc"}]

Sample - Get Patches tab report

API request

```
curl -X GET
"https://<QualysBaseURL>/pm/v1/report/patch?havingQuery=tags.name%3A%20%60Cloud%20Agent%60&platform=Windows&query=rebootRequired%3A%20true%20and%20%28patchStatus%3A%20%5BMissing%2C%20Installed%5D%20and%20isSuperseded%3A%20false%29&sort=%5B%7B%22vendorSeverity%22%3A%22asc%22
```



```
%7D%5D" -H "accept: application/json" -H "Authorization: Bearer <<jwt token>>"
```

Response

```
{  
  "reportId": "ba7fa6f8-a5cd-40ed-85ce-eacb4191abef"  
}
```

Download Report in the .CSV Format

/rest/pm/v1/report/{reportId}/download

[GET]

Use this API to download previously generated reports in the .CSV format.

Input Parameters

Parameter	Description
reportId (string)	(Required) Specify the report ID that you want to download.

Sample - Download a specific report

API request

```
curl -k -o /home/jdoe/e81269ce-0abf-4896-92fd-b171b8aaf48a.csv.gz -X
GET
"https://<QualysBaseURL>/pm/v1/report/ba7fa6f8-a5cd-40ed-85ce-
eacb4191abef/download" -H "accept: application/json" -H
"Authorization: Bearer <<jwt token>>"
```

Note: Ensure that you have permission to access the report download folder that you specify in the request.

Response

% Total Current	% Received	% Xferd	Average Speed	Time	Time	Time	
			Dload	Upload	Total	Spent	Left
Speed							
100	101	0	101	0	0	138	0
--	138					--:--:--	--:--:--